

Orthopaedic Department Annual Magazine 2023



Western Health

Our 2040 vision

WESTERN MUSCULOSKELETAL

delivering exceptional orthopaedic care & innovation



**As a team, we provide exceptional
orthopaedic care to the West**

OUR CORE VALUES

“The patient comes first”

Patient Care and Empathy

Honesty and Integrity

Commitment and Contribution

Mentorship and Friendship

CONTENTS

ORTHOPAEDIC ANNUAL MAGAZINE 2023

Editorial

Min Jia Tang	4
Phoebe Walker	5

People

Head of Unit Message	6
Our Department	8
Orthopaedic Consultants	10
Orthopaedic Registrars	12
Orthopaedic Fellows	12
Orthopaedic Administration / Researchers	14
Awards and Recognition	16
Registrar Award	16
Inspire Award Recipient	18

Fellowships

Adrian Talia	22
Ali Alghamdi	24
William Wilson	25
Peter Kvarda	26
Eran Keltz	27

Clinical Services

Deputy Head—Clinical Service	28
Deputy Head—Paediatrics	30
Footscray Hospital	32
Sunshine/JK/Williamstown Hospital	33
EMR Go Live 2.0	34
Operative Templates	36
Warrnambool Report	37
ERAS	38
Williamstown Efficiency Project	42
Whod.com.au	46
Virtual Fracture, OAHKS and PAR Clinics	48
Adult Fracture Clinic	52
Paediatric Fracture Clinic	53
Orthopaedic Technicians	54
Elective Surgical Bookings	56
Trauma Surgical Bookings	57

Education & Training	
Director of Training	60
Transition to Practice	62
Bone School	63
Case Conference	64
Registrar Feedback forms	65
Beers and Tears	69
Friday Morning Resident Teaching	70
Medical Student Teaching	71
Medical Student Report	72
Arthroscopic Simulator	73
HMO Report	74
Training in Radiofrequency Ablation	75
Grand Round—ERAS	76
Registrar Presentations	77
Journal Club	78
Research Report	84
Victoria University Symposium	92

Social

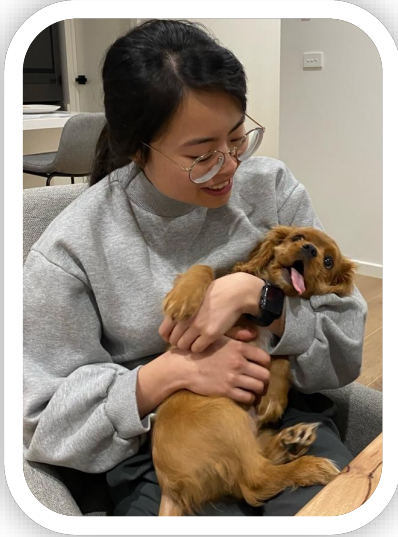
Warrnambool Road Trip	114
AOA Soccer Tournament	116
Christmas Party	118
Thank You	122
Births and Weddings	127
Yearbook Quotes	128

*Front cover picture drawn by
Raghavan Unni*

This document has been produced by the Orthopaedic Unit at Western Health
as a review of our achievements and activities of the year

A YEAR OF UNITY AND GROWTH

Dr Min Jia Tang — Unaccredited Orthopaedic Registrar



2023 has been an unforgettable chapter in my career thus far. After spending 2 years in the unforgiving Australian wilderness (Tasmania), battling harsh terrain and foraging for food (learning the ropes of being an Orthopaedic registrar and savouring Tasmania's Pinot and Seafood), I finally returned home to Melbourne this year. And I am pleased to report that my year at the Western has been everything I hoped it would be and more. People often say that what makes or breaks a workplace is the people you work with and I could not have asked for a better team of registrars. Every member of our registrar team took turns stepping up to shoulder the workload throughout the year in order to allow each other to pursue their individual goals. Whether it was supporting Peter and Mike in their Fellowship preparations, celebrating the arrival of Lachlan

Wight's new baby, or enabling Ben, Lily, Phoebe and I to apply for the training program, we have demonstrated tremendous support for each other as a cohesive team. Outside of work, we've gotten to know each other well- hanging out at Hardiman's Hotel on Friday afternoons, celebrating birthdays and even taking a roadtrip to Waarnambool together. These experiences have played a transformative role, encouraging everyone to come out of their shell. As the year draws to an end, we've become more than just co-workers and something more akin to a close-knit family (warts and all). I feel very privileged and grateful to have been amongst this group of individuals and will leave Western Health with people who I am proud to call friends.

It goes without saying that the consultant body and administrative team have also been exceptional. I have learnt so much and truly appreciate the effort everyone has made to teach and support me throughout the year. There are a number of people/ AI servers I would like to thank in particular:

- Prof Tran for his astute guidance and valuable feedback during our Beers and Tears sessions. And for showing us girls how its done at the Xmas party.
- Adrian Talia for being an incredible trauma fellow, always

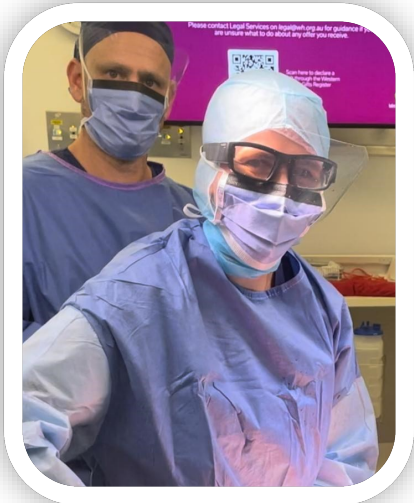
going above and beyond for your registrars with interview practice and fracture clinic teaching and being one of the most supportive and patient teachers I have met. And for the peri-operative Proscuitto Ciabatas at Café Cirino.

- Lachlan Wight for finding the time to juggle an incoming baby with extra interview sessions outside of work, and for sharing his love of 'Da Bomb' hot sauce to go with it. Full disclosure Lachy- the sauce was hot, but I didn't want to show it.
- ChatGPT for making me feel like an idiot whenever it spat out a model answer to an interview question I thought was impossibly difficult. Highly recommended resource for interview practice.
- Duy Thai for his newfound interest in environmental conservation and no longer using single use plastic cups in clinic. When you get serious about it, the next step will be to buy an electric car and install solar panels...

Thank you to the unit for a wonderful year. I will leave the Western as a proud alumnus with many fond memories as a I journey onto the training program with Phoebe in 2024. ■

WEST IS THE BEST

Dr Phoebe Walker — Unaccredited Orthopaedic Registrar



A long time ago a mentor of mine said to me ‘Go to Western’, ‘Western is the best’. Lucky for me, I’ve been at Western Health since I was a medical student. It’s hard to believe I was at Western well before COVID, when the XR meeting was on 1 East and Adrian Talia was still an Unaccredited Registrar.

I’ve had an amazing opportunity to get to know this unit so well over the past 6 years. Everyone has been extremely friendly and supportive. I’d exceed my word count if I listed each person. I think it’s true that the Western Orthopaedic Department is like an extended family. This unit has shaped me to become the doctor that I am today. I can look back now and see how much I have developed as both a training surgeon and a person.

Some of the highlights of my time at Western include:

- Presenting at the 2018 AOA ASM in Perth as a med student (thanks

to Prof. Tran and Mr. Talbot) and attending my first device rep dinner at Rockpool Bar & Grill (free food goes a long way as a medical student!)

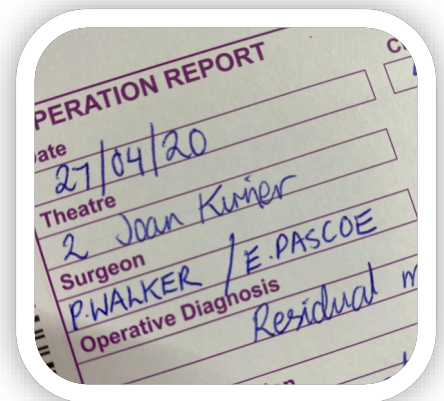
- The supportive nursing staff on 1 West who got me through ‘ward week’ as an intern.
- Being handed the knife and doing my first case where I was listed as one of the ‘surgeons’. I even kept a photo of the op report.
- Attending the Ortho Christmas parties and being one of the last ones standing (until all the ‘young’ people out partied me!)
- English language classes with Mr. Harris in Paeds Fracture Clinic. Union. noun: an act or instance of uniting or joining two or more things into one.
- Constantly finessing my plastering skills with regular tips and tricks from John Kenealy. ‘Did you see my last cast?!’

I am incredibly grateful to everyone for their support and advice, which helped me get onto the training program. A particular mention goes to those who hosted and attended ‘Beers and Tears’ and the practice interview sessions. This was an invaluable resource and I wouldn’t have been successful without it.

Whilst I’m looking forward to discovering new places and learning

new things, Western will always hold a special place in my heart and I hope to come back one day. I’m certainly going to miss everyone when I move on, although I can’t say I’ll miss getting bumped by another caesar!

P.S I’m still a bit envious that I never got to compete in one of the famous registrar vs consultant go-kart races. I think all those hours of watching ‘Drive to Survive’ would give me a chance of getting points. ■



HEAD OF UNIT MESSAGE



"That's life. It's all change.

Change is hard."

These profound words were spoken to Barbie by one of the main characters, and they echo the challenges and triumphs we've experienced as a team and as individuals in public health. Indeed, change is a formidable force, but in 2023, we have remained steadfast in our commitment to continually enhance patient care, education, and research.

Barbie has become a surprising phenomenon, a cultural touchstone perfectly encapsulating the essence of this year and our post-Covid recovery. In our collective mindset, we draw parallels between the iconic characters of the film and our daily struggles as healthcare professionals. Like the diverse characters, we've faced challenges, catalysed change, and experienced both failures and numerous wins,

leading to profound moments of growth.

Effecting change in large organizations like Western is no easy feat. As Ken discovered, it's not all about beaches and horses. However, we, like Barbie, refuse to accept the status quo. Standing still on our high heels feels unnatural. Our path forward involves stepping off our heels and tirelessly working to improve the reality for our patients while supporting each other.

Venturing into the wider world to enhance the patient's journey, we encounter doubters and challenges. Some may want to confine us to the boxes we came from, while others may scoff at our attempts to blaze new trails, like rollerblading down the promenade in fluorescent leotards. Nevertheless, we persist.

In the vast and complex system of Western Barbieland, it's easy to feel like a sidekick, underappreciated and overlooked, akin to the sentiments of Ken or Allan. Yet, amidst this complexity, we find our uniqueness. We are a bit stereotypical Barbie, weird Barbie, Ken, and Allan at times. Diverse but unified, we are thinkers like Weird Barbie—capable of independent thought, true to ourselves, and leaders of change as part of the Western team.

Our back-to-back victory in the soccer competition against other orthopedic units is not merely about

lifting a trophy. It symbolizes the team building, camaraderie, and lasting friendships formed through year-long interactions on WhatsApp, training sessions, and improved communication that ultimately enhances patient care. Every year, regardless of the trophy, we emerge as victors.

This culture of teamwork empowers us to achieve seemingly impossible changes. Earlier this year, suggesting routine discharge one day after hip and knee replacement might have been met with skepticism, but we accomplished it. We faced the challenges, acknowledging the diverse nature of our patients, and excelled. Kudos to Rebecca and the ERAS team for winning the Best Care Award for patient-centered care.

This year, the post-COVID cellulite to start times to theatre became increasingly noticeable and impacting access to care. But organisational change was rarely a one-person task. We engaged in discussions, negotiations, debates, arguments, and sometimes cried in frustration. Yet, this year, our collaborative efforts, meticulous planning, and swift implementation have led us to nearly meet our Williamstown Theatre On time Start targets within weeks of launch.

At the beginning of this year, envisioning the transformative initiatives we would undertake might have seemed ambitious. From

PEOPLE

routine telehealth to outcome score collection, EMR implementation, a new departmental website, surgical templates, HMO induction revamp, unit protocol refresh, a talk by a visiting professor from Harvard, a cadaver lab excursion, a symposium with Victoria University, completing recruitment for randomized studies, registrars securing positions in Victorian accredited training and successful fellowship exams —these ambitious goals were achieved.

The culture of teamwork at Western Health empowers us to implement seemingly impossible changes, engaging stakeholders and challenging ingrained practices. Our ability to adapt and thrive in a rapidly changing environment speaks volumes about the resilience and innovation that define the Western team. Together, we stand ready for the challenges and victories that the future holds, united in our commitment to excellence in patient care and making a lasting impact on Western Barbieland. ■



PEOPLE

OUR DEPARTMENT

Head of Unit

Prof Phong Tran

Deputy Heads of Unit

Clinical

Dr Daniel Sydenham

Education and Training

Dr Duy Thai

Paediatric

Dr Chris Harris

Consultants

Dr Saeed Asadollahi

Dr Theepan Balasubramaniam

Dr Lachlan Batty

Dr Michael Bullen

Dr John Clifford

Dr Ray Crowe

Dr Cam Fary

Dr Chris Haw (Honorary)

Dr Ish Hussaini

Dr Brett Jackson

Dr Ben Johnson

Dr Matthan Mammen

Dr Russell Miller

Dr Brett Moreira (HMO Supervisor)

Dr William Pianta

Dr Sasha Roshan-Zamir

Dr Rohan Sheehy

Dr David Shepherd

Dr Simon Talbot

Dr Scott Tulloch

Dr Raghavan Unni

Fellows

Dr Adrian Talia

Dr Ali AlGhamdi

Dr Eran Keltz

Dr Peter Kvarda

Dr Gilles Van Eetvelde

Dr Timothy Voskuilj

Dr William Wilson

Accredited Registrars

Dr Peter Wong

Dr Lachlan Wight

Dr Michael Millar

Dr Nick Marson

Dr Timothy Maher

Unaccredited Registrars

Dr Sean Griffiths

Dr Min Jia Tang

Dr Ben McElwee

Dr Lily Salehi

Dr Toan Phu

Dr Phoebe Walker

Dr Cheryl Anne Lee

Dr Andrew Griffith

Residents

Dr Francesca Sasanelli

Dr Christopher Mackenzie

Dr Anthony El-Bitar

Dr Amy Luu

Dr Shaun Anthony

Dr Mark Reich

Dr Chetna Sinha

Dr Matthew Sun

Dr Jun Jie (Jason) Tan

Dr Allan Le

Dr Xuechen Qiu

Dr Shyamolie Mathur

Interns

Dr Samko Jamriska

Dr Lucinda Pullar

Dr Brianna Herring

Dr Callum Barnden

Dr Aviva Green

Dr Hannah Drew

Dr Oliver Zhang

Dr Jessica Huang

Dr Wen-Chen (Winston) Wu

Dr Nicky Lieu

Dr Jacqueline Seiffert

Dr Anei Ochan-Thou

Dr Gabin Soosaipillai

Dr Nicky Lieu

Dr Evelyn He

Dr Kelsie Faulds

Dr Sophie Heath

Dr Daniel Lamanna

Dr Wendell Zhang

Dr Riley McGoldrick

Dr Madeleine Fei

Dr Mitchell Canny

Dr Jeffrey Sanderson

Dr Emine Demiri

Dr Eliza Zhang

Dr Ryan Lim-Yip

Dr Aidan Clifford

Dr Christel Harijanto

Dr Emily Matejin

Dr Salma Ashraf

Dr Emily Zdilar

Dr Emma Hurley

Dr Emma Fletcher

Administration, Research

And Development

Lidia Carbone

Aleksandra Cecati

Bianca Pietrapertosa

Jessy Doherty

Alice Stoiadin

Rebecca Fewster

Dr Oren Tirosh

Libby Spiers

Eugenie Ng

Minh Ngo

Natali Coric

Honorary Researchers

Dr Lachlan Huntington

Alev Asilioglu

Carlie Bauer

Melissa Formosa

Carley Clendenning

PEOPLE



PEOPLE

ORTHOPAEDIC CONSULTANTS



Prof Phong Tran



Dr Daniel Sydenham



Dr Duy Thai



Dr Chris Harris



Dr Saeed Asadollahi



Dr Theepan Balasubramaniam



Dr Lachlan Batty



Dr Michael Bullen



Dr John Clifford



Dr Raymond Crowe



Dr Camdon Fary



Dr Ishfaq Hussaini



Dr Brett Jackson



Dr Ben Johnson



Dr Matthan Mammen



Dr Russell Miller

PEOPLE



Dr William Pianta



Dr Sasha Roshan-Zamir



Dr Rohan Sheehy



Dr David Shepherd



Dr Simon Talbot



Dr Scott Tulloch



Dr Raghavan Unni

PEOPLE

ACCREDITED REGISTRARS



Dr Nick Marson

TTP



Dr Mike Millar

SET 5



Dr. Peter Wong

TTP



Dr Lachlan Wight

CORE



Dr Tim Maher

INTRO

CONGRATULATIONS

Mike and Peter on successfully completing the FRACS Exam,
Phoebe and Min on acceptance into Orthopaedic Training, and
Tim for passing the OPBS Exam

ORTHOPAEDIC FELLOWS



Dr Ali Alghamdi



Dr Eran Keltz



Dr Peter Kvarda

PEOPLE

UNACCREDITED REGISTRARS



Dr Andy Griffith



Dr Sean Griffiths



Dr Cheryl Lee



Dr Ben McElwee



Dr Toan Phu



Dr Lily Saheli



Dr Min Jia Tang



Dr Phoebe Walker



Dr Adrian Talia



Dr Gilles Van Eetvelde



Dr. William Wilson

PEOPLE

ORTHOPAEDIC ADMINISTRATIVE / RESEARCHERS



Lidia Carbone



Bianca Pietrapertosa



Alice Stoiadin



Aleksandra Cecati



Jessy Doherty



Rebecca Fewster



Libby Spiers



Minh Ngo



Dr Oren Tirosh



Eugenie Ng



Natali Coric

PEOPLE



REGISTRAR

The Registrar Award recognises a staff member who has gone above and beyond in ensure smooth sailing within the orthopaedic unit. This year we recognised two such individuals.

Sue Borstner

Often referred to as our 'Orthopaedic mum', Sue's friendly demeanor and caring nature never fails to create a warm and cheerful atmosphere in 1W. She has an innate ability to remain patient and kind, even in the most challenging situations. Those who have had the privilege of working with Sue since internship often make mention of her exceptional work ethic and the genuine friendships she fosters on the ward. Sue always goes above and beyond for her patients and

staff, even coming out of her comfort zone this year to attend the Orthopaedic Christmas party.

Sue Borstner, thank you for being the amazing professional that you are. Your contributions extend beyond the clinical realm, making a

lasting impact on the well-being of both patients and colleagues. Your warmth and dedication embody the spirit of healthcare excellence, and we are grateful to have you as a valued member of our team. ■



AWARDS AND RECOGNITION

Olivia Vacarro

Olivia, thank you for your hardwork and unwavering "can-do" attitude as the Outpatient ANUM. You always listen to what we have to say, take into account our feedback, and put effort into improving things for the unit. When our fracture clinics run late, not only do you stay back to make sure we are supported, you also ensure the hangry registrars (and patients) are fed and watered. Olivia is always proactive to ensuring our clinics don't become too overloaded- tirelessly calling up countless patients to move their appointments or letting us know ahead of time if a clinic will be overbooked so that we can plan

ahead. No task is ever to big or too small and you always do it with a smile. Even amidst the incessant complaints during the teething phase of EMR Go Live, you kept your chin up and kept helping us to navigate through a new system. Olivia, you are a phenomenal team member. Your positivity is infectious. You are one of our biggest cheerleaders. We cannot thank you enough for everything you have done for the registrars and consultants. And we



are proud to recognise you as the invaluable staff member, teammate and friend that you are. ■



INSPIRE AWARD RECIPIENTS

Congratulations to the following recipients of INSPIRE Awards:

Amelia Marshall

**Advanced Practice Paediatric
Orthopaedic Physiotherapist**



Amelia has been instrumental in reestablishing the paediatric advanced practice physiotherapy outpatient clinics at Joan Kirner Women’s and Children’s. In 2022, a serious staffing and skill shortage resulted in the paediatric advanced practice physiotherapy outpatient clinics being closed between March and September. These clinics care for children and infants with developmental hip dysplasia, structural talipes, and other paediatric orthopaedic conditions such as knock knees and toe walking. During this period, all referrals needed to be forwarded to other services, such as the Royal

Children’s Hospital, which resulted in families needing to travel significant distances for services, sometimes on a weekly basis. Amelia worked hard to gain credentialing in this area, which involved working alongside the orthopaedic medical team at JKWC and accessing mentoring and support via Royal Children’s Hospital. Amelia has advocated strongly to reinstate these clinics and improve on previous models to ensure excellence in patient care. She has successfully advocated for more collaborative models, where Physiotherapy and orthotics are able to run concurrent clinics to better meet the needs of children with structural talipes requiring foot bracing and developmental hip dysplasia patients requiring hip bracing (rather than patients needing to attend the hospital on two separate days to access these services individually).

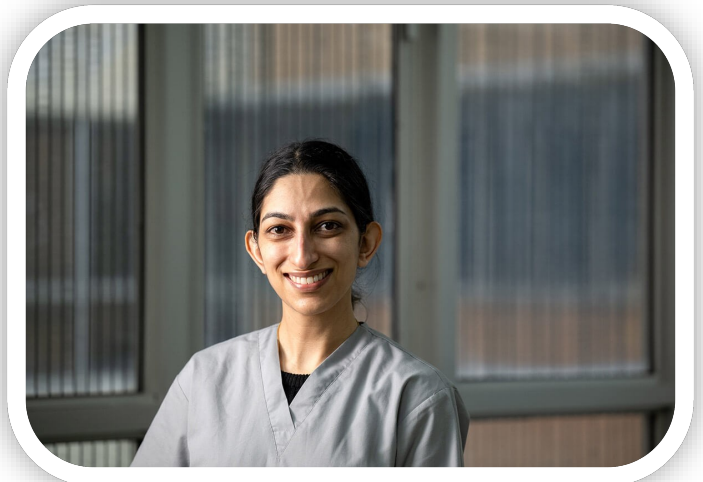
Amelia models compassion and accountability – always seeking to reflect on and improve practice,

communication, and teamwork. Amelia actively reviews and monitors data for these clinics to look at trends and opportunities for further improvement. She is an EMR superuser and member of the Data Committee. She is a key support for the wider Paediatric Physiotherapy team in completing accurate and timely data collection and transitioning to the EMR 2.1 rollout. Amelia is a valued and respected team member who inspires others to perform at their best. She provides exceptional patient-centred care with a focus on safe, evidence-based, and inclusive practice.

Bhavna Trivedy

**Physiotherapist—Adult &
Paediatric Virtual Fracture Care**

Bhavna is an indispensable member of the Physiotherapy Department. She performs her role with the



INSPIRE AWARD RECIPIENTS

highest level of excellence. She is extremely proactive in monitoring and improving the well-being of staff in her team (accountability). She is always professional and respectful in her interactions with her colleagues and patients and is also always available to lend a hand or listening ear to anyone who needs it despite her own busy schedule (compassion). She is truly an exemplary leader who leads by example and strives to create positive change

Claire Russell

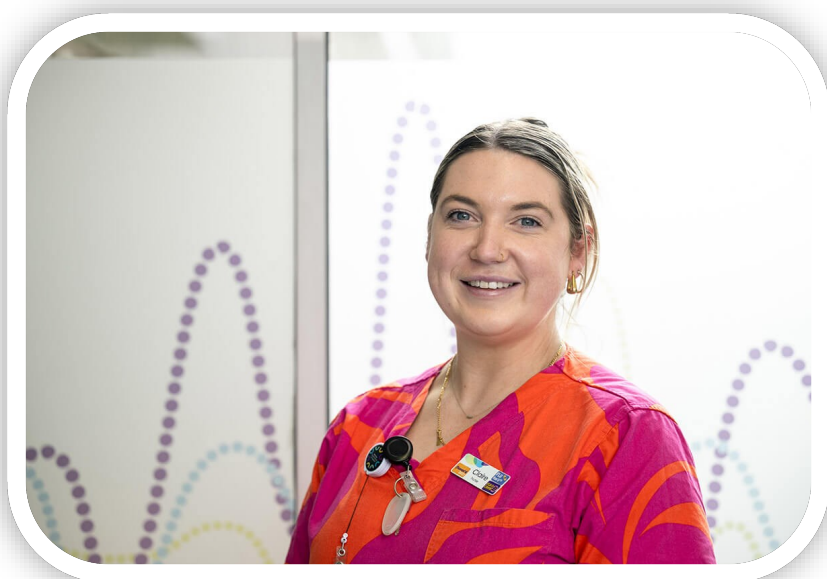
**Clinical Nurse Specialist
Ward 1 West**

Claire did everything you expect from a nurse and more. She is the most friendly, happy, caring, and, most importantly, trustworthy Nurse I have ever dealt with. Although Claire worked with a client and not a family member or myself, I would choose her to care for my family members in a heartbeat. She should be used as a mentor and example for others on what a great, compassionate, friendly, honest Nurse is. Her communication and dedication to patient care are of a high standard, and my client speaks more highly of her than anyone else. I know that other staff and patients on the ward speak highly of this young, outstanding Nurse and human being, too

Kulie Van Rooyen

**Nurse Unit Manager
Ward 3B**

Kylie has been an exceptional Nurse Unit Manager in fostering compassion towards patients, their families, and all the staff caring for patients on the ward. Her care and kindness toward patients and staff are infectious and have led to a significant cultural change in Ward 3B, where a positive and respectful environment is fostered daily. She is an incredibly valuable member of the Western Health family in initiating positive change in all aspects of patient care



INSPIRE AWARD RECIPIENTS

Lachie Talbot and Jeremy Flanagan

Clinical Assistants—Orthopaedics

Lachie and Jeremy are final-year medical students at Western Health and worked alongside me for several months as clinical assistants in orthopaedics. Although all of the Clinical Assistants have been helpful to the Orthopaedics team, both of these gentlemen stood out for their accountability, excellence, and safety. They demonstrated excellence and accountability in their approach to their work, starting work early (6 a.m.) to help prepare the ward round notes for the team and going out of their way to look for and address administrative tasks to help the team work better. They were proactive in reviewing prescribed medications and understanding their rationale to better understand their roles and responsibilities as interns next year and working as a junior doctor in orthopaedics. They were especially proactive in identifying what would help the team work better and establishing how to make themselves competent, safe junior doctors next year; an example would be attending to outstanding discharge summaries. On top of their usual clinical assistant responsibilities, medical studies, research projects, and several ongoing volunteering roles, they spent several weekends

addressing this issue on their own initiative. In addition to these efforts listed above, their rapport with the doctors, nursing, and PCA staff reflects a genuine commitment to being an ongoing member of the Western Health family. Both of them have well and truly espoused the values that Western Health looks for in junior doctors and are well prepared for internship in 2024. I wish them the best of luck in their future careers. ■

Lauren Nacey

Consultant Geriatrician

Lauren has been nominated for her tireless efforts in improving care and outcomes for the vulnerable orthogeriatric patient group admitted to Western Health after fracturing their hip. She demonstrates accountability by being heavily involved in monitoring and reporting patient outcomes and liaison with the hip fracture registry and other external agencies. She is always very respectful in the way she interacts



with the other key multi-disciplinary groups who make up the orthogeriatric care team, including, but not limited to, the nursing staff on Wards 3B and 1W, the orthopaedic team, the physio team, the hip fracture liaisons, and other members of the operations and executive teams. She always focuses her work on the safety of her patients by constantly encouraging everyone to improve and evolve care and focus on providing our patients with the best possible outcomes that Western Health can achieve. ■



INSPIRE AWARD RECIPIENTS

Laurinda Ndenzako

Associate Nurse Unit Manager
Ward 3B



Laurinda leads with kindness daily in her ANUM role; however, her work within her Pressure Injuries (PI) portfolio on Ward 3B has been outstanding. She has successfully mobilised the staff to work toward ‘best patient care.’ Laurinda has demonstrated excellence through successfully managing the PI portfolio and has engaged with staff to ensure the completion of risk assessments, tracking of data, and implementing new ideas. She demonstrates accountability by ensuring targets are met in relation to audits and the implementation of correct equipment. Laurinda is compassionate and takes time to meet all the patients under her care, interacts with families, and always works toward ‘best patient care’ and outcomes. ■

Susan Borstner

Associate Nurse Unit Manager
Ward 1 West

Sue is an exceptional nurse and a valuable member of the orthopaedic ward and team. She strives to implement positive change for patients on the orthopaedic ward and has been a key member in initiatives to improve outcomes for patients with hip fractures. Sue always fosters positivity, compassion, and respect in her patient care and the support she provides to her team. ■



Taka Munganiaw

Physiotherapist

Lower West Ward, Williamstown

Taka works diligently and shows kindness, compassion, and accountability for his work. He always aims for ‘best patient care’ and patient-centred care. He helped to lead and drive a patient-centred discharge home by working collaboratively with the Occupational Therapists (OT). Together with OT, Taka helped to directly discharge a patient home to his environment and avoid an extended stay in the hospital. The patient was wheelchair-bound and could not replicate his transfer set up in the hospital. A discharge home visit occurred, and the patient was reunited with his wife at home. The patient was very grateful for the hard work of Taka and OT

colleagues. Taka helps make the Lower West Ward Nursing staff feel comfortable about providing ‘best care’ to orthopaedic patients. He is constantly providing feedback and praises/ encourages staff to feel empowered. Taka educates nursing staff and supports them to help drive cultural change with the implementation of enhanced recovery elective arthroplasty patients. Taka has been pivotal in ensuring nursing staff are trained and feel safe in assessing and reviewing patient’s post-standard knee arthroscopy with crutches. He took the initiative and saw areas of improvement to provide safe and effective education in a timely manner. ■



DR ADRIAN TALIA — TRAUMA FELLOW



Dr Tang looking pleased with herself after smashing out a posterior approach, Radial Nerve neurolysis and plating of a midshaft humeral fracture.

When I left the Western to start my first post on the training program at the end of 2018. I had a sneaking suspicion that I would be back. Having been at the West during my formative years as a junior doctor. It was only natural that I sought to return as a consultant, living 10 minutes up the road doesn't hurt either. When Prof Tran asked me to return during my final year as a trainee, my fate was sealed. Unfortunately there was the slight complicating factor is that I would only be present for 6 months before I was due to start fellowship in Oxford in August 2023 and well, you don't look a gift horse in the mouth.

It was a real pleasure to spend six months full time at Western

prior to my departure for fellowship abroad. I am a much better surgeon, teacher and leader for having done so, I can say that I learnt more in those six months, than in the last couple of years as a trainee. Not having a consultant to do the "one percenters" for you in terms of pre-

op decision-making and with the knife in your hand really places you on the steep slope of the learning curve. I enjoyed working with my former bosses, who remembered me as an intern and medical student, who are now my colleagues. Teaching and helping the registrars, including exam and interview preparation was a real pleasure.

As Mr Batty and Prof Tran correctly said to me when I visited their rooms, just prior to the end of my training. The West is as I remember it, A progressive and inclusive unit where your colleagues will support you if you back yourself. I definitely felt this as a freshly minted surgeon - but a few examples include discussing complex foot and ankle cases with Mr Shepherd and Mr Roshan-Zamir in Friday morning outpatients, calling for help from Mr Harris when on day 1 on call I had a 9yr old patient with a subtrochanteric femoral fracture,



FELLOWSHIPS



Seeing the sights in Florence, Kids in tow.



Magdalen College grounds , Oxford

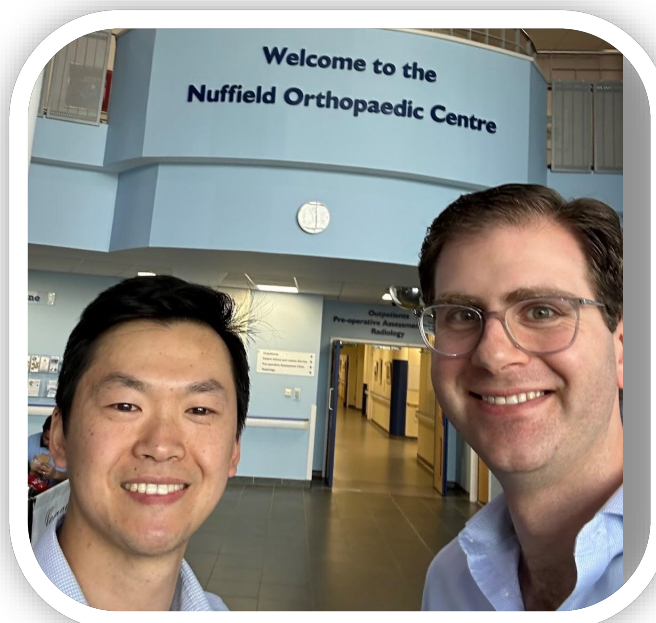
doing my first distal femoral replacement with Mr Sydenham holding my hand, a planning then executing a revision periprosthetic femoral fracture with Mr Moriera standing beside watching like a hawk (and heckling), Mr Clifford providing advice from the airport departure lounge for a femoral head fracture and Mr Jackson coming in to assist when I second guessed myself during a hip replacement, I felt welcomed from day 1 and certainly “part of the club”.

Absence does indeed make the heart grow fonder, and I certainly do appreciate many of the aspects of our unit at home, having now been removed and in a completely different country. The skills and experience that are gained up on an international fellowship with world-class surgeons will be invaluable for the rest of my career, and living

abroad with the family is a once in a lifetime experience, however I am glad that I have a place to return to once my time here is up.

I look forward to returning to Western in mid 2024 post fellowship. ■

Bumping into friends and Colleagues



DR ALI ALGHAMDI — HIP AND HAND FELLOW



Here we go, another year of at Western health to create more unforgettable moments. August 4th of this year marked my last day as hip fellow and I would like to extend my appreciation and gratitude to Prof Tran for taking his

time in teaching me how to become a skilled surgeon in Anterior Hip Replacement and Hip Arthroscopy. It would be a privilege to complete another fellowship in Western Health. Trauma and Hand fellow is totally different experience for me where I feel my self more involved in the work flow here at Western Health. In the past 6 months, I spent my time between supervising fracture clinics and dealing with emergency trauma cases. This was challenging. However, I was surrounded by experienced colleagues who were always willing to provide their support and guidance. I can't wait to embark on my journey in Hand and Wrist fellowship with Mr. Mammen. Once I join Mr.Mammen I believe together will be the vigilantes of

Western Health especially when it comes to Hand and Wrist complex cases like Batman and Robin in Gotham City. AOA soccer tournament is no longer the right place for Western Hammers team to compete, especially after winning the AOA trophy second year in a row and securing the 3rd star on their Jersey and becoming the most decorated team in this tournament. I feel honored that I represented this team in the last 2 years and I am confident that Western Hammers can compete against A league teams. In the End, I would like to thank every one who helped me throughout my time here at Western Health. I will always feel proud and fortunate that I spent time here in a great orthopedic team. Orthopedic unit at Western Health will be always my home ■



Eran Keltz, Ali Alghamdi and Prof Tran celebrating Western's well deserved win over Western at the AOA Soccer

DR WILLIAM WILSON — SPORTS KNEE FELLOW

As part of my knee fellowship at Orthosport Victoria, I was delighted to receive the honorary appointment to work at Western on Fridays under the stewardship of Lachlan Batty. I am a knee surgeon from Glasgow, UK, and this formed part of my year in Melbourne. It was immediately evident that the department has a warm, welcoming atmosphere and I was instantly made to feel part of the team by all members of staff. Such a collegiate feeling within the unit is to be admired, given the demands of modern medicine, and the ethos of the department is driven by the great enthusiasm of Phong.

My experience at Western has given me the opportunity to perform several complex cases such as multiligament knee reconstructions that are not commonly encountered in the private system. Also, the chance to put into practice many of the techniques I have picked up from the surgeons at Epworth,

through the Friday lists at Williamstown was a valued experience. This included several methods of ACL reconstruction, different systems for TKR, blood clot augmentation of meniscal tears, primary repair of ACL as well as both tibial and femoral sided PCL repair.

I have a particular interest in internal brace augmentation of ligament repair, so it has been fantastic to be involved in the STACLr trial through recruitment, operating and follow-up of participants. Credit to all involved with this work and I hope to continue to be involved in this going forward.

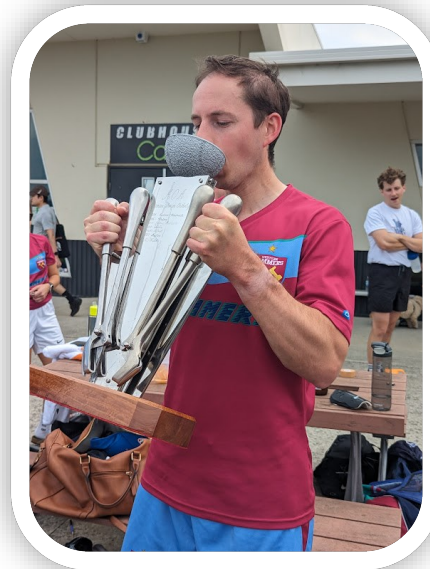
Lachlan has been a fantastic supervisor, imparting knowledge whilst giving me the opportunity



and space to think and contribute actively to patient care. Thank you to him and everyone at Western for the warm welcome you have extended to me. I will always remember the great triumph of the undefeated champions performance at the annual football tournament and it was great to play a part in that! Merry Christmas and Happy New Year to everyone! ■



Scott Tulloch and William Wilson enjoying a mid game kebab



Celebrating the win with a beer from the trophy cup

FELLOWSHIPS

DR PETER KVARDA — FOOT & ANKLE FELLOW



During my six-month Foot and Ankle Orthopaedic Surgical Fellowship at Western Health Hospital in Melbourne, Australia, under the guidance of Dr. Shepherd and Prof. Tran, I experienced an enriching professional journey. Working closely with Dr. Shepherd provided me with invaluable

insights into advanced surgical techniques and patient care. The fellowship offered a dynamic learning environment, where I had the opportunity to observe and participate in a wide range of surgical procedures, enhancing my surgical skills and proficiency in managing foot and ankle surgical cases. Collaborating with Dr. Shepherd and Prof. Tran, both esteemed professionals in the field, allowed me to learn from their experience and expertise. Regular participation in case discussions, grand rounds, and one-on-one mentoring sessions enriched my knowledge of evidence-based practices, treatment modalities, and decision-making processes in foot and ankle surgery. Culturally, Melbourne provided a vibrant backdrop to my learning experience.

The city and Australia, outside the hospital setting, added a unique dimension to my overall professional and personal growth and the wellbeing of my family.

In conclusion, my six months in Melbourne were a period of immense growth, both professionally and personally. The fellowship at Western Health Hospital, under the mentorship of Dr. Shepherd and Prof. Tran, has significantly enriched my skills, broadened my perspectives, and solidified my commitment to providing high-quality foot and ankle orthopaedic care. I am grateful for the opportunity and look forward to incorporating these experiences into my future practice. ■



DR ERAN KELTZ — HIP FELLOW

I've come as an IMG to Melbourne with the dream of developing my skills as an orthopaedic trauma surgeon, with a specific focus around the pelvis and the hip. My plans suffered a significant delay due to COVID19 global crisis, a common situation which had put an obstacle for many peoples' careers. Eventually, with a bit of luck and determination the dream became a reality.

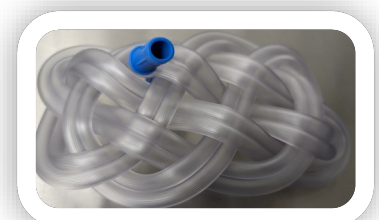
Following a satisfying pelvis trauma fellowship in the Alfred, I was very fortunate to be accepted to Prof. Tran's hip fellowship, which I hoped would allow me to enhance my knowledge and self-sufficiency in elective cases. The fellowship focuses mainly hip arthroplasty and hip preservation surgery. In the last 4 months I had the privilege and pleasure to participate in just over 300 cases, including more than a 100 primary hip arthroplasty surgeries. Prof. Tran's experience in fellow level training as a proctor allows him to grant me "hands on" experience, so I can already feel a huge progress with my technique. The scope of Prof. Tran's patients is wide, so I had to adjust and enhance my techniques and knowledge with shoulder arthroplasty and knee arthroscopy and arthroplasty as well. Surprisingly, with no premature intention, I found myself drawn and interested by knee arthroplasty philosophies and techniques. Since I've always enjoyed trauma for the fundamental



reason no case is exactly the same as the previous, I find this diversity stimulating, challenging and rewarding.

Other than advancing on my learning curve with managing routine elective cases the "standard" way, I gain exposure and experience with implementing novel techniques and technologies, such as advanced 3D pre-op digital planning, knee arthroplasty kinematic alignment, PSI, navigation (in shoulder and knee arthroplasty) and robotic UKR. I also practice high skill surgical exposures, mainly direct anterior approach to the hip and the sub-vastus approach to the knee. Occasionally I can also pursue my interest with revision arthroplasty surgery by visiting other surgeons. I also maintain my interest with trauma surgery by operating independently ad-hoc lists and taking on-calls.

As part of my career growth, I was given the opportunity to commence several research projects, harnessing the Western orthopaedic unit collaborative research network. Hopefully some of these projects will mature into insightful results soon. Moreover, the close relationship with prof. Tran is an ongoing mentorship in terms of soft skills, team work, leadership and "dreaming big". As I intent to assume leadership roles on my return back home, I find this insightful and empowering. I hope I can make the Western orthopaedic unit and Prof. Tran proud of me in a few years, and plan to give back in terms of adopting the same educational approach for future trainees. ■



DEPUTY HEAD REPORT — CLINICAL SERVICES



2023 signifies yet another triumphant year for the Western Health Orthopaedic Unit as we continue to navigate our evolving landscape. With COVID well and truly out of the way, clinical services returned to business as usual, making up for lost time.

Throughout the past 12 months, our orthopaedic team has been unwavering in its efforts to address the surging elective surgery waiting

lists. Initiatives such as optimizing the utilization of Williamstown Hospital, incorporating Public in Private operating practices, and refining our preadmission and bookings processes have played pivotal roles in reducing the underutilization of operating lists. The collaborative efforts of our multidisciplinary team, consisting of doctors, nurses, and allied health professionals, have effectively managed an increasingly complex and diverse patient group.

Notably, the resumption of face-to-face Xr meetings and the revival of case conferences have proven to be instrumental for team members like Peter and Mike in their preparations for fellowship exams. The reintroduction of a face-to-face format for the Fracture Clinic has enhanced patient-physician interactions and facilitated more comprehensive assessments.

Williamstown's Orthopaedic Unit has continued to excel, achieving remarkable theatre efficiency and reinforcing our commitment to streamlined processes and optimal resource utilization. A strategic initiative introduced this year involved dedicated theatre lists for TTP trainees, aimed at expediting the resolution of elective waiting lists while providing valuable hands-on experience for trainees.

The return of elective operations has not only allowed us to address the growing demand for orthopaedic care but has also provided a platform to resume training registrars in the full scope of practice. Trainees have seized the opportunity to catch up on missed experiences from the past two years, gaining exposure and confidence under the supervision of our experienced surgeons.

In 2023, we bid farewell to senior orthopaedic surgeon Dr. Robert Pianta, who retires after an incredible 40-year contribution to the Western community. Dr. Pianta's leadership, commitment to patients, and dedication to registrar education have left an indelible mark on our unit.

Anticipating the year ahead, we look forward to the growth and adaptation of our unit. This year saw the successful implementation of ERAS, resulting in a significant



Dan, Lachlan and Min failing miserably at Trivial Pursuit in between cases

CLINICAL SERVICES

reduction in hospital LOS (Length of Stay). The integration of cutting-edge technologies and the impending move to the new Footscray Hospital are among the exciting developments on the horizon.

As we reflect on the accomplishments of 2023, we express our gratitude for the collective efforts that have brought us this far. We eagerly embrace the challenges and opportunities that 2024 holds, confident in the resilience and dedication of our orthopaedic team. Thank you once again for your continued commitment and hard work.

address the growing demand for orthopaedic care but has also provided a platform to resume training registrars in the full scope of practice. Trainees have seized the opportunity to catch

up on missed experiences from the past two years, gaining exposure and confidence under the supervision of our experienced surgeons.

This year saw the successful implementation of ERAS, resulting in a significant reduction in hospital LOS (Length of Stay). As we reflect on the accomplishments of 2023, we express our gratitude for the collective efforts that have brought us this far. We eagerly embrace the challenges and opportunities that 2024 holds, confident in the resilience and dedication of our orthopaedic team. Thank you once again for your continued commitment and hard work. ■



On Duty Dan, looking Fabulous.



Off Duty Dan, looking equally Fabulous.



DEPUTY HEAD REPORT — PAEDIATRICS

Dr Chris Harris



MG's famous Octagon logo is 100 years old, having first appeared in 1923.

MG cars was the brain child of Cecil Kimber, who was the general manager at Morris Garages in Oxford UK. He used the M of Morris and the G of Garages to create the brand name MG. His then boss, William Morris, had been just a young boy when, in the 1880s, German automotive engineers (G. Daimler, W. Maybach, K. Benz) had started to produce what would later be known as the motor-car, a drivable vehicle powered by an internal combustion engine. Morris had risen from humble beginnings, having left school at the age of 15 to work for a local bicycle seller and repairer. He subsequently set up his own business, initially with bicycles, then with motor-cycles, and finally with motor-cars. He is credited with

pioneering the introduction to the UK of Henry Ford's techniques of mass production. Not only did he go on to build /purchase a number of factories but he also bought out some of his suppliers and competitors, including Wolseley, who at that time were well into their development of an overhead camshaft 8 hp car, which he subsequently launched as the Morris Minor. At one stage, William Morris was said to be Oxford's largest employer. He also founded Nuffield College (University of Oxford) and the Nuffield Foundation.

MG went on to become an iconic British sports car marque, made most famous by it's MGB model, of which they sold around half a million. But nothing stands still in manufacturing, and whilst in the 1950s Britain churned out more cars than anywhere except America, by the 1970s the industry was in trouble. Numerous British car manufacturers had gradually merged, forming the partially nationalised and subsequently infamous British Leyland. Not only was British Leyland plagued by cars that were uninspiring and of poorer build quality than their foreign competitors but also by frequent industrial action plus a flawed business model that saw it's own individual brands competing with

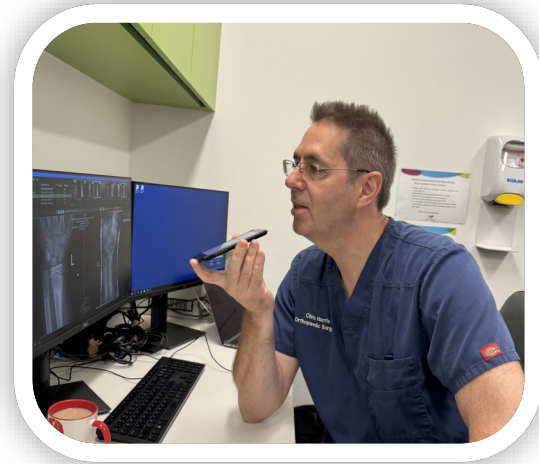
each other for both share of the market and for research and development money (e.g. MG was competing against Triumph for the small and niche market of 2-seat sports cars). British Leyland's name and ownership changed frequently from the mid 1980s and ended in 2005 when it went into receivership. It was the death knell of the British motor manufacturing industry.

In 2005 a Chinese automobile group purchased the Longbridge manufacture plant in Birmingham plus rights to the MG brand, creating a new company which was subsequently named MG Motor. All seemed quiet for a while, but six years later, in 2011, MG Motor launched a new model, the MG6. It was the first all-new MG model for 16 years. Things then happened quickly. In 2014 they were voted third place for the 'Best Manufacturer' category in the Auto Express Driver Power survey and saw their brand's sales rise by 361%. In 2016, MG Motor Australia was officially launched in Sydney and the following year MG was the first Chinese-manufactured vehicle to be awarded a five-star ANCAP rating. In 2018 MG entered into a three-year sponsorship deal with the National Basketball League and in 2020 they became the major sponsor of the Port Adelaide

DEPUTY HEAD REPORT — PAEDIATRICS

Dr Chris Harris

Aptly nicknamed 'The Great Dictator' - Mr Harris shown here undertaking one of his favourite past times- dictating letters



Football Club and

Melbourne Stars cricket team. Also in 2020, the MG ZS EV was launched as the most affordable electric vehicle in Australia. In 2021 MG Motor broke into the top 10 selling automotive brands in Australia. MG Australia sold just 600 cars in 2017 but in 2022 it sold 49,582. By mid-2023 they were the 7th best-selling brand in Australia, making up almost 5% of the market and outselling the likes of Mercedes, BMW, Volkswagen, Tesla, Subaru, and Nissan.

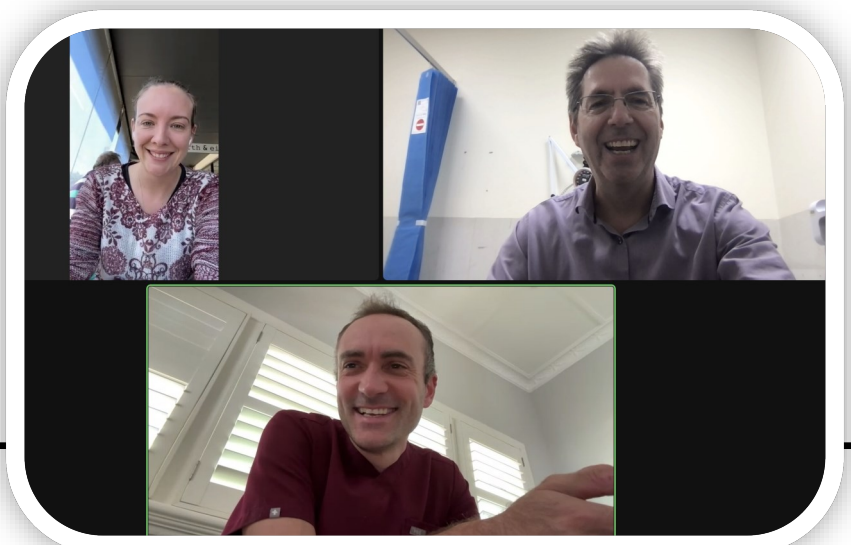
So what's this got to do with paed ortho at Joan Kirner? The answer is strategy. The Chinese bought the MG brand and it's associated British know-how, not so try to sell outdated cars that no-one wanted but because they had a strategy for the future, and clearly it's paying off big style. Well, 2023 was a year of strategy for the orthopaedic department at Western Health. Phong Tran and the three deputy heads met at the start of the year to strategise, and during the year we have continued to do so. We had to enlarge the paed ortho service. Part of the reason for this was the ever increasing demand on our services (elective and trauma) which we were really struggling to meet (we had some patients waiting 4 years for a new appointment and by the time it

came they were too old for the paed clinic). The other reason was that we were concerned that the 'British' surgeons (Ben Johnson and myself) were about to go into receivership (not financial I must add; remember, it's an analogy). Two predominant things were required for this expansion. Firstly, we needed more paed ortho surgeons, something that's typically as rare as finding a classic MG in immaculate condition in someone's barn. We were fortunate in that we had identified two surgeons who were coming off fellowships in 2023 and who had shown interest in working at Western Health. Secondly, we needed the money to fund their appointment, and this is where strategy paid off. We're hoping that the coming few years will see a dramatic expansion in our car sales, sorry, service.

p.s. Cancel culture is nothing new. The person credited as being first to propel a vehicle by means of the

internal combustion engine is Siegfried Marcus. His first vehicle, produced around 20 years before the other German engineers mentioned above, was more of a handcart than a car, but subsequent iterations were cars. But Siegfried Marcus was of Jewish descent, and during World War II the Nazi propaganda office sought to erase his place in history and ordered his work to be destroyed, his name expunged from future textbooks, and his public memorials to be removed.

Talking about cancel culture, did our supracondylar just get cancelled again by an emergency caesar :-)



FOOTSCRAY HOSPITAL

Dr Tim Maher —Orthopaedic Registrar



The Orthopaedic Unit at Footscray Hospital stands as a pioneering force in clinical activity and trauma care within the Western region. Throughout the year 2023, the unit consistently delivered top-tier care to adult patients grappling with both emergency and elective orthopaedic conditions, along with those necessitating subspecialist or intensive support. The committed registrar and resident team on-site played a pivotal role in meeting the escalating demand for emergency care due to traumatic injuries or accidents in Melbourne's western suburbs. They also rose to the challenge of addressing the post-Covid backlog of elective operations. Throughout the bustling year, the

team effectively managed the demanding trauma load, showcasing unwavering commitment, seamless teamwork, and exemplary leadership. A sincere acknowledgment is extended to Jessy Doherty, our trauma liaison nurse, for her outstanding contributions in securing extra operating lists and ensuring timely care for our patients. Special recognition is also reserved for the orthopaedic consultants, particularly doctors Ali AlGhamdi and Eran Keltz, current fellows who generously supported cases, often stepping in at the last minute, particularly toward the tail end of this year.

Yet, our dedication to patient care transcends surgical interventions. Under the adept leadership of Nurse Unit Manager Rachel Kropman, the nursing and allied health staff on ward 1 west consistently delivered exceptional, holistic care to our orthopaedic patients. Equally commendable is the work of our colleagues on ward 3B, managing some of our more complex orthogeriatric cases with the support of our orthogeriatric team and a shared model of care. Beyond tending to the surgical needs of

orthogeriatric patients in the west, the seasoned orthopaedic team added a festive touch with Dr. Sean Griffiths' delightful Christmas jingle spin-off, titled 'It's beginning to look a lot like Nof-mas.'

Despite the sometimes demanding and lengthy days, Friday mornings at Footscray foster a sense of camaraderie and appreciation. The team gathers to marvel at each other's achievements from the past week, often commencing with a registrar presentation on an orthopaedic topic of interest. This not only serves as a valuable learning forum but also provides an opportunity to hone presentation skills. A particularly memorable highlight from the year includes 'Magic Mike Millar,' a post-fellowship exam trainee surgeon, engaging the crowd in quizzes and doling out protein bars for correct answers – perhaps the epitome of the most ortho bro moment ever. ■

SUNSHINE & JOAN KIRNER HOSPITALS

Dr Sean Griffiths — Unaccredited Registrar



Big kids, little kids
Kids with broken bones
Good parents, bad parents
Distracting kids with phones
Short legs, we can fix by
Using fancy things
But if you like your kids wrist intact
Keep them away from swings

Another year of caring for the paediatrics and adult population has gone by at Sunshine and Joan Kirner, with a variety of challenges and successes. Almost every registrar has rotated through over the year, under the guidance of our leaders Chris Harris and Ben Johnson. Most of the consultants and fellows in the unit have provided on-call support through the year, for at times very challenging cases. We couldn't have achieved what we did without the support of our clinic and ward nurses, including Morgan and Rachel.

A personal and team memorable event which stands out was Sunshine receiving several victims from the school bus crash in May - being the on-call registrar attending a mass-casualty event was nerve-wracking and a test, but the

knowledge of being supported by the Western team as a whole and Mr Thai in particular was reassuring. The collegial nature of Western was demonstrated again, where the ED team were all familiar and on-call General Surgery reg was a friend. Mr Thai then operated late into the night, saving the little girl's elbow, giving a master class in sorting things out in a true emergency operation.

Through the first half of year we welcomed in Peter Wong as paediatric-keen senior trainee, hopefully we can welcome him back in years to come. ■

Sean and Ben catching up on the latest goss in Lily's backyard



EMR GO LIVE 2.0

Dr Andy Griffith– Unaccredited Orthopaedic Registrar

The second major rollout phase of the Electronic Medical Record (EMR) system at Western Health occurred this year, resulting in an amalgamation of several different programs and systems onto the Cerner program. Titled 'EMR 2.1', this included incorporating the daily functioning of Women's and Children's, Emergency Department, Perioperative and Critical Care Departments, Aged Care and Cancer Services, and Specialist and Allied Health Clinics onto the Cerner EMR System.

From an Orthopaedic perspective, the most significant impacts were in the perioperative and specialist outpatient clinic spaces, where we transitioned to writing notes and operation reports on Cerner. The new EMR has also provided greater continuation of care and communication from the Emergency Department to the inpatient setting for patients admitted under Orthopaedics, with easy access to ED documentation and results. Outpatient clinic notes are now written in EMR alongside inpatient notes, pathology results and imaging reports, superceding the BOSSNet program that was previously used for outpatient documentation. This will allow for easier work flow when referring back to notes from a patient's

inpatient encounter when seen in the outpatient setting, and vice versa.

A few of the Orthopaedic registrar and residents were selected to be Superusers, attending additional training sessions prior to the EMR Go-Live to allow them to help educate and guide the rest of the unit through the transition. In addition, supernumerary EMR staff were allocated to attend outpatient clinic and theatre in the first few weeks of the roll-out to help with the transition.

As with any major change, the EMR 2.1 roll-out has not been without some challenges and hurdles that we have had to identify and address as we begun to use the new program. Thanks to everyone's patience and proactiveness in identifying issues and helping to suggest solutions and workarounds, we have been able to continue to function efficiently and effectively as a unit on the new EMR. The junior medical staff and superusers have also provided tremendous support to the consultants in clinic, who are often on-site less frequently and therefore had less access to the EMR support in the first few weeks of the roll-out.

Later in the year, the Orthopaedic team has also been involved in a pilot program trialing the EMR

mobile app, with a view to it being out across the Western Health organisation more broadly in the near future. This app allows for patient notes to be accessed and written, pathology and radiology results to be viewed, and observations to be monitored. This has provided greater flexibility in allowing junior medical staff to access patient records throughout the day, rather than having to wait until they are in front of a computer. Another exciting aspect of the app is the ability for pictures to be taken and uploaded directly to a patient file - allowing for greater access to clinical photos between users while better maintaining patient confidentiality, as well as allowing for intra-operative drawings to still be uploaded to the patient file despite the discontinuation of paper operation notes.

We look forward to further upgrades and expansion of the EMR in the future, with the digitalisation of previous patient paper files and BOSSNet records. This ongoing digital health innovation will allow the Orthopaedic Unit to continue to provide modern and efficient best care to the West. ■

WILLIAMSTOWN HOSPITAL

Dr Shyamolie Mathur — Resident



Williamstown Hospital is often considered a sanctuary for our team, providing an enjoyable and fulfilling work environment. Where else can you start your day with a lovely coffee by the beach and a greeting from the iconic Williamstown cat?

In 2023, Williamstown has undergone notable changes, and

the orthopaedic unit, alongside the dedicated theatre and ward staff, has been working passionately to deliver excellent patient care.

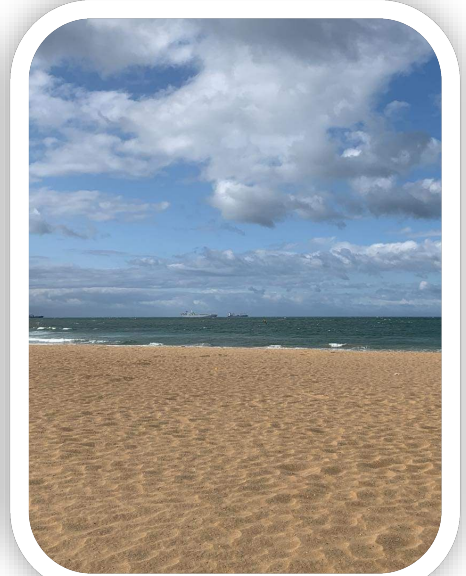
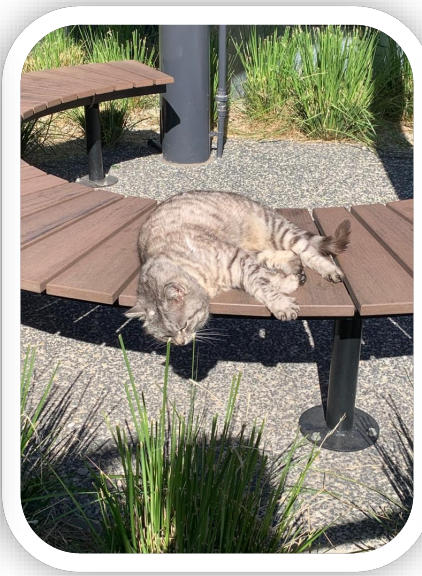
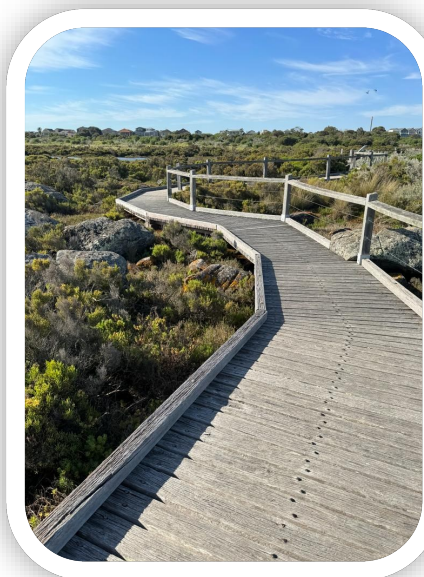
This year, the ERAS programme launched at Williamstown Hospital. While it has been a massive undertaking, the success it has seen and the quality of care is a testament to the incredible work led by Bec and executed by our theatre and ward staff. The program's implementation has extended care to a larger population in the western suburbs, and patients consistently express gratitude for the efficient care at Williamstown.

Having spent a large part of my resident year at Williamstown, I've had the privilege of developing strong connections with the dedicated nursing and allied health

staff on Lower West Ward. Abi and her team consistently aim for excellence in patient care and are unwavering advocates for our patients, and we sincerely appreciate their commitment.

Jhunel and the theatre team continue to create a safe and efficient environment for patients and staff. With the start of the theatre improvement project, the orthopaedic unit is continually striving to optimise theatre operations at Williamstown theatres.

It's been a great year in 2023, and we look forward to what the next year will bring at Williamstown! ■



OPERATIVE TEMPLATES

Dr Andy Griffith– Unaccredited Orthopaedic Registrar



The Western Orthopaedic Unit has been using the Sunray database for several years now, which has been designed, updated and maintained by Oren Tirosh, with input from the rest of the unit as required.

For the past several years we have been recording all operations done by the unit within this audit, as well as using it to keep track of inpatient admissions. The data that has previously been collected included patient details, injury details, surgery details, ward/bed details and the names of the consultants and registrars involved in their care. This forms our ward list used on ward round, and provides valuable data to be able to refer back to should patients represent, and also allows us to thoroughly audit the performance of the unit with PROMs follow-up data.

A long-term goal has been for the

Sunray audit to be used to generate an electronic operation report for all the operations performed, recording all the key details for each operation that we record in our standard operation reports. During Covid lockdown, working groups were established to determine what key operation details should be ideally captured for each of the main operations we perform. For the past few years templates for total hip replacements and total knee replacements have been live, with our goal this year being to create and publish templates for the remainder of operations we perform

Throughout the year, one of the unaccredited registrars, Andy Griffith, has been curating the work done during the Covid lockdowns, to generate the final versions of each operative template specific to each operation. Oren Tirosh, who created and continues to maintain the unit's Sunray database, has then been uploading and refining these templates as they are uploaded onto the database.

So far, we have managed to generate operative templates for all of our common trauma and elective procedures. Once these details are completed, an operation report can be generated on a standard operative template, with appropriate layout and formatting

similar to how a standard paper operation record would be displayed. Given that operation reports have transferred to being done on Cerner following the EMR 2.1 roll out earlier in the year, we will now continue to work on how best to be able to easily transfer the data entered in Sunray onto the EMR operation report, while maintaining appropriate formatting and minimising unnecessary duplication of work.

As we start to use these new templates, we will gather feedback as to how the templates and formatting can be further improved to make the final product as beneficial and practical as possible. Ultimately, the aim is that the operative templates collect all the salient information for each different type of operation performed, while also minimising unnecessary duplication of work.

The operative templates should significantly aid the quality and depth of data collected within the Sunray Audit, which will prove invaluable for future research and auditing of the unit's performance long into the future. ■

WARRNAMBOOL REPORT

Dr Cheryl Lee — Unaccredited Registrar

I had a whale of a time working in the Warrnambool orthopaedic unit this year. Unfortunately, there were no whale sightings this year.

The Warrnambool orthopaedic unit consists of a closely knit team of four consultants, one trainee, two unaccredited registrars and two junior doctors. The consultants are

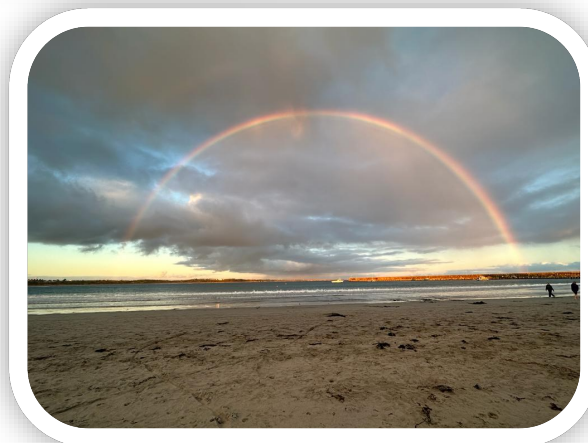
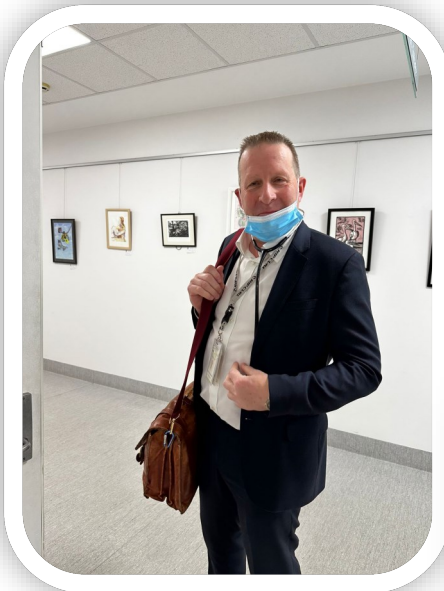
generalists but each of them have a subspecialty of interest which provides a good variety of cases to learn from. Last year, the unit performed 903 cases which is still below pre-pandemic levels.

The work week in Warrnambool is divided into either a clinic or theatre week with formal weekly teaching, registrar presentations and monthly journal club presentations. Formal teaching sessions often foreshadowed the cases we would see in the coming week so we were careful to avoid topics such as compartment syndrome and pulseless supracondylar

fractures.

The registrars and junior doctors go out for weekly team dinners and pool competitions to decide who gets to operate on the next NOF. Fortunately, as pool is not one of my strengths, this tradition was abandoned, and operations were performed by the on-call registrar.

As a first year registrar, Warrnambool is an invaluable experience and it is where I finally found my feet and settled into my role. The smaller, highly supportive



ENHANCED RECOVERY AFTER SURGERY (ERAS)

Rebecca Fewster — Enhanced Recovery After Surgery Coordinator

In early November 2022, the Enhanced Recovery After Surgery (ERAS) program was initiated at Western Health in collaboration with the West Metro Health Service Partnership (HSP) as part of a surgical reform initiative. Under my leadership (Bec Fewster) and the guidance of Phong Tran and Richard Grygiel, the program began with a comprehensive examination of the current patient journey for individuals undergoing hip and knee arthroplasty. This evaluation covered the entire process, starting from the initial outpatient review and placement on the surgical waiting list, extending through to discharge and outpatient follow-up. The review highlighted a historical workflow characterized by isolated work processes, leading to multiple inefficiencies and potential patient disengagement at various stages.

By the conclusion of November, significant progress had been made in enhancing the patient journey and optimising the flow. Efforts were concentrated on creating seamless pathways from the initial outpatient appointment, connecting patients with their general practitioners and other specialised services.

An all-encompassing care model for prehabilitation was developed to enhance the preparation of our patients for surgery. This involved



addressing key areas that commonly pose challenges for discharge: Physiotherapy, Dietetics, Psychology, and Social Work. A focused strategy was established, utilising screening tools to categorise patients into the most suitable services in the period leading up to their surgery. This resulted in the creation of three distinct streams: a universal stream for low-risk patients, a targeted stream for those with specific concerns, and a specialist stream designed for our most vulnerable patients.

The decision was made to establish a Virtual Surgery School as a crucial resource for our patients. In collaboration with the HSP, scripts were developed to encompass fundamental information beneficial to all surgical patients. Additionally, three videos were created to address specific needs of the orthopaedic cohort. With input from local consumer groups and various

disciplines at both Western Health and Melbourne Health, these scripts were finalised and the videos were recorded in early January 2023. The final filming occurred at Williamstown, providing insights into admissions, theatre procedures, and recovery processes to acquaint our patients with the surgical experience before their admission.

The initiation of the Universal Prehabilitation stream took place at the conclusion of January 2023, encompassing all scheduled patients with surgeries planned from March onwards. The team, comprising Physiotherapists, Administration, and Allied Health Assistants, conducted a combination of online and in-person services. This approach aimed to ensure the inclusion of all patients, including those who are non-English speakers.

Around the same time, the Physiotherapy Pre-Admission Clinic

CLINICAL SERVICES

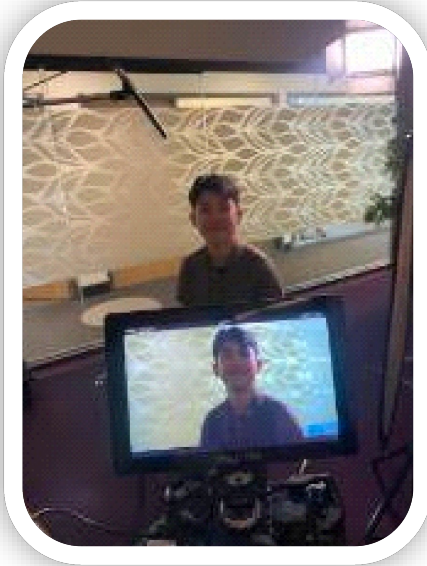


Photo left – Song Tinh Le. Photo right – Armani Archers, Song Tinh Le, Daina Didzys and Common Ground Productions.



ERAS working group (Left to right)
– Rachel Kropman, Daina Didzys,
Abi Davis, Sean Griffiths, Vera
Ciavarella, Raheela Dato, Bec
Fewster, Bhavna Trivedy



Photo: (Left to right) Vera Ciavarella, Otilia Vieira

ENHANCED RECOVERY AFTER SURGERY (ERAS)

Rebecca Fewster — Enhanced Recovery After Surgery Coordinator

was launched, outlining the expectations for our patients within the ERAS framework and the corresponding journey they would undergo. The clinic underscored the importance of providing patients with specific handouts to aid their inpatient experience and to serve as a guide for their rehabilitation upon returning home.

In February, Lower West Ward at Williamstown initiated preparations for implementation, enabling all ward, theatre, recovery, and allied health staff to ready themselves for the forthcoming changes. There was a palpable enthusiasm, as everyone was eager to enhance the care provided to our patients. The inaugural ERAS patients were admitted on March 2nd, following a streamlined ERAS pathway. Both patients underwent total hip arthroplasties and were successfully discharged on the same day—marking a significant triumph that left the surgical and inpatient teams eagerly anticipating future successes.

Following the first month of implementation, we achieved a saving of slightly over 30 bed days, nearly reaching half of our financial year target for 2022-23.

This course of action persisted until May when our principal Anaesthetist, Claire Burrows, completed the anaesthetic pathway. This resulted in the establishment of a standardised anaesthetic pathway, outlining preferred first- and second-line options. Accompanying this was a post-operative orderset, ensuring that our patients had pre-planned analgesia and adjunct therapies for their admission, thereby streamlining their care and minimising variability in treatment.

Along came the end of the financial year and there were many wins to be celebrated:

- A fully functional model of care for Prehabilitation including universal, targeted and specialised streams,
- Virtual surgery school including orthopaedic specific videos
- A myriad of patient resources

The implementation at Footscray faced a delay due to EMR 2.1, but when it finally occurred, it was met with enthusiasm and excitement from the 1West team. Under the leadership of Rachel Kropman (1West NUM), the team conducted thorough education and set up all necessary elements for the rollout. The initial

outcomes were promising, with one patient discharged on the first day, although there was disappointment as another patient had to be transferred to ICU. Despite this setback, the latter recovered well and was still able to go home on the fourth day, demonstrating a significantly shorter length of stay compared to the average for the previous financial year.

Since this point both Williamstown and Footscray have continued to work with this program and the overall length of stay has reduced across all surgical groups.

In November, Western Health conducted their annual Best Care Awards. Awards that highlight the extraordinary work completed within the organisation. This year the Best Care Award for Patient Centred Care was won by ERAS! It was great recognition for a fantastic initiative that has been met with such great enthusiasm across all aspects of the patient journey.

Total Beddays Saved
117.73
Patients Treated Through ERAS
85
Average Beddays Saved Per Person
1.39



CLINICAL SERVICES

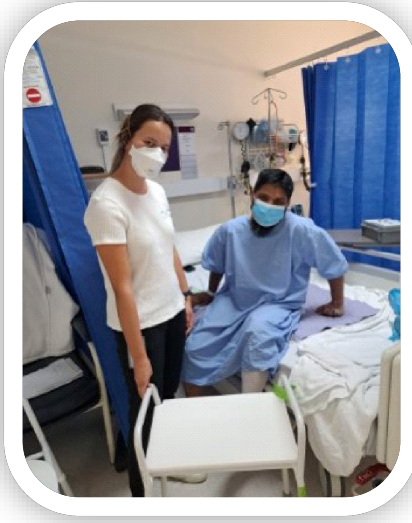
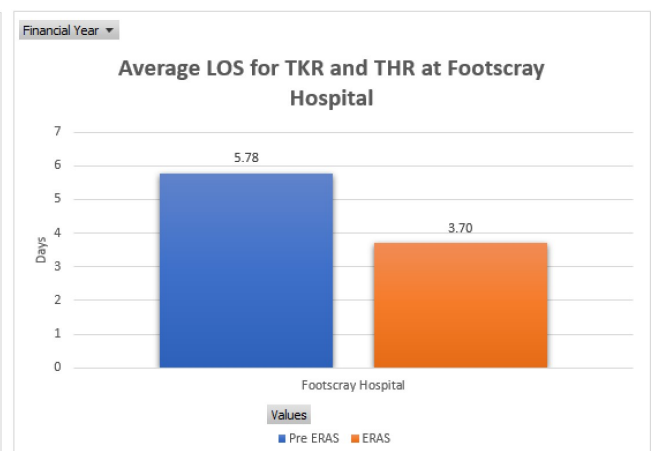
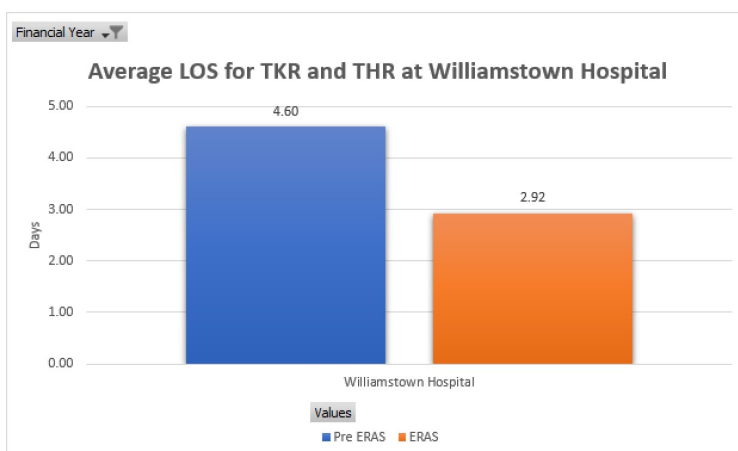


Photo top left: Michaela Paoli, Mohammed Alam. Photo middle: TinKit Tam, Mohammed Alam, Photo right: TinKit Tam, Mohammed Alam, Michaela Paoli.

After a huge year ERAS has met many milestones. As of December 2023, we have had:

- 230 patients
- Saved 397 bed days
- Reduced our length of stay by 1.67 days per patient at Williamstown
- Reduced our length of stay by 2.07 days per patient at Footscray
- 36% of our patients are going home in less than 2 days
- 64% of our patients are going home in less than 3 days
- More than halved our readmission rate

Whilst the numbers are important, the most important part of this project is improving the patient journey and satisfaction and that's what ERAS does. It focuses on personalised, coordinated care. It guides the patient through the entire process, from preparation to recovery. ■



WILLIAMSTOWN EFFICIENCY PROJECT

Prof Phong Tran

Access to care is a constant challenge in public healthcare with one of the significant bottlenecks is access to theatre. The introduction of post-Covid infection control protocols has further contributed to delays in theater operations, which were already struggling before COVID.

As the saying goes, there’s nothing certain in life except death, taxes and surgeons complaining about theatre start times.

However, achieving punctuality in

start times goes beyond a simple expectation for everyone to be on time and perform their duties promptly. It involves navigating changes that disrupt long-standing practices, rigid systems, and interdependent stakeholders, akin to navigating a narrow road with twists and blind turns which seems from a distance to be straight and easy.

Enhancing start times and the number of cases handled per day could significantly improve our ability to deliver timely care to

individuals experiencing painful musculoskeletal conditions.

Fortunately, we were fortunate to obtain the expertise of Kristina Mitreska from West Metro HSP, bringing valuable experience from her work with Toyota and their Lean Principles and Continuous Improvement philosophies. Kristina conducted a thorough independent assessment of our processes, engaging with all stakeholders to identify the root causes of inefficiencies at Williamstown Theatre. It was determined that

WTN Project Governance Framework

➤ 3 weekly regular catch ups



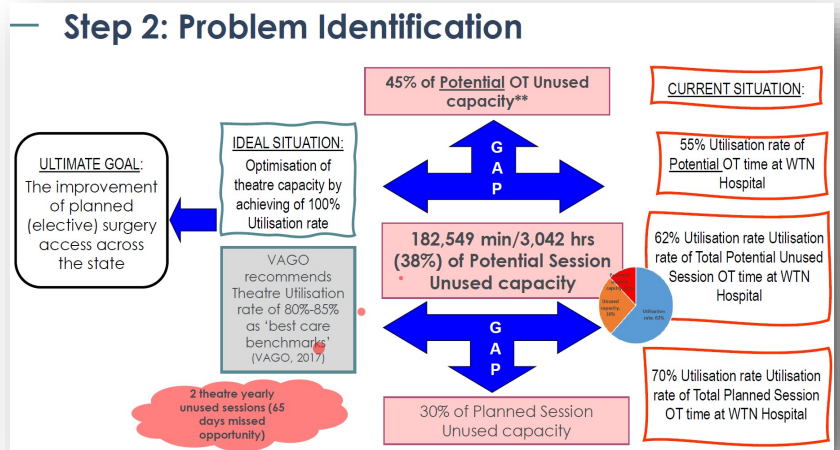
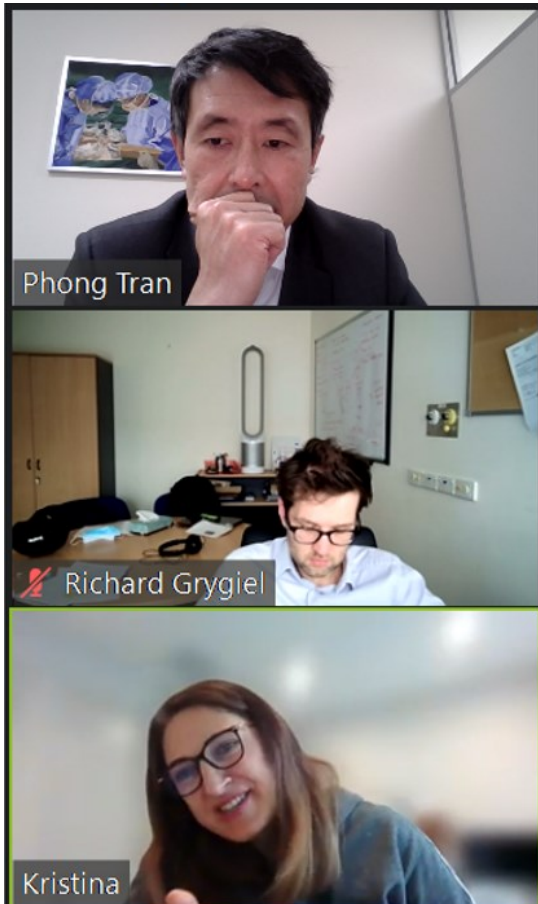
Responsible for active engagement, by:

- Validation of processes, issue identification & data information
- Assisting & identification of the prioritised problem
- Assisting/Validating in undertaking of Root Cause analysis
- Identify the countermeasures
- Implementation of the change
- Follow through the changes & establish reporting mechanisms
- Standardise the change.

CLINICAL SERVICES

improving efficiency necessitated a weekly meetings, and champions focus on on-time theater starts. To address this, measures and countermeasures were developed, alongside a set timeline, regular

from each stakeholder group. The results have been promising just a few weeks into these initiatives. Looking ahead, the ongoing prioritization of this project in 2024 is expected to foster a lasting culture of improvement and streamlined processes at the theater. ■



Step 3: Proposed Activity Plan

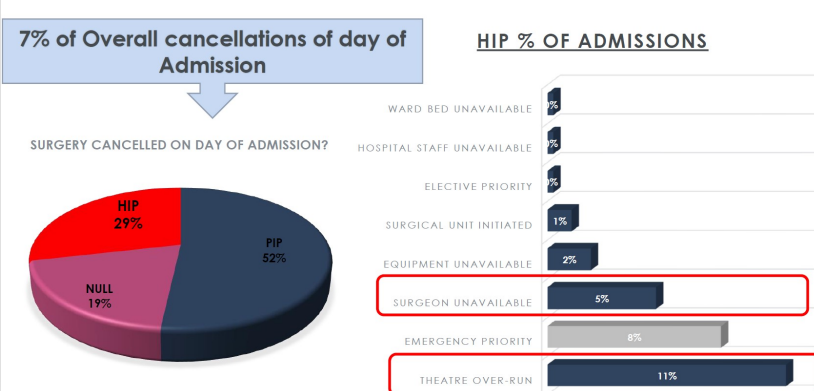
Activity	Resp.	Timing																Status								
		June'23				July'23				August'23				September'23					October'23				Nov'23			
		W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	
Background & Problem Breakdown	KM / RG																									✓
Prioritised Problem & Set the Target	WG																									✓
Root Cause Analysis	KM / WTN team																									✓
Develop Countermeasures	KM / WTN team																									✓
Implement Countermeasures	WTN team																									^
Confirm Results	KM / WTN team																									^
Review																										TBC
Standardise	KM / WTN team																									TBC
Report	KM/WTN team																									TBC

Project Status

- Plan
- Change/Extension of plan
- Completed
- Need Improvement / Progressing
- Failed / Delayed
- TBC To be commenced

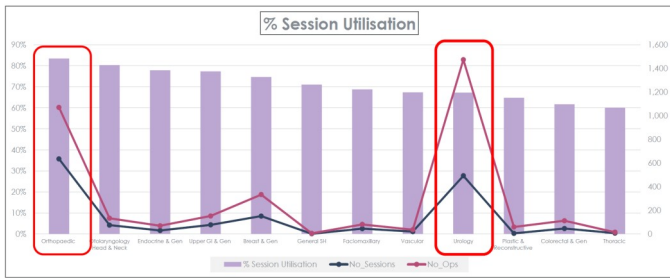
Step 4: Data Analysis: Postponements

Surgery Cancelled on the day of Admission



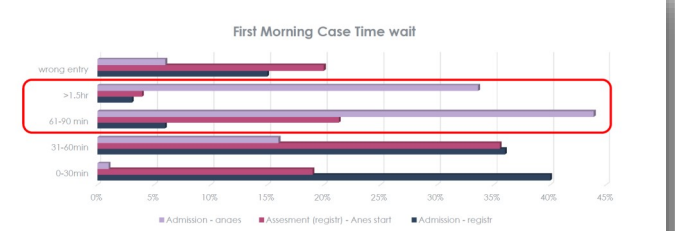
WILLIAMSTOWN EFFICIENCY PROJECT

Step 4: Data Analysis: Utilisation per Session speciality



- Lowest utilisation of high volume procedures have been noted for Urology (67%) . Compared with Orthopaedics Utilisation of 84%

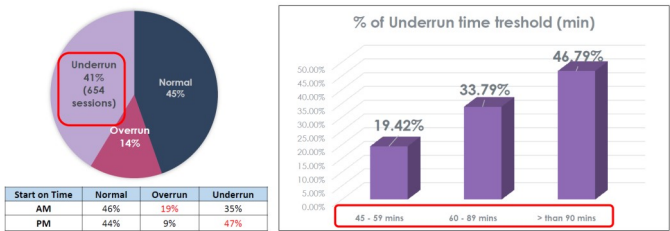
Step 4: Data Analysis: Admission to Anaesthesia start time of First case



- 34% of the first morning cases wait more than 1.5hr from the admission to anaesthesia start time
- 45% of the first morning cases wait more than 30min from admission to nurse registration
- 61% of the first morning cases wait more than 30min from nurse registration anaesthesia start time (25% of the patients wait >60 min).
- Significant wrong data entry (>20%)

Step 4: Data Analysis: Underrun, Overrun, Turnaround Time & Surgical efficiency

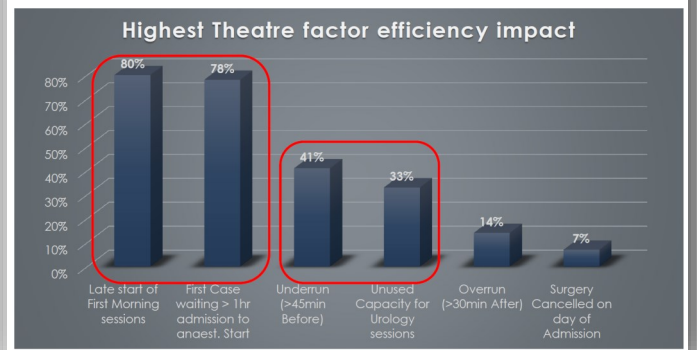
- 71% Surgical Efficiency (NSW target 65%)
- Average Turnaround time is 19 min (QLD target 15 min)



- Surgical Efficiency - The proportion of the preparation for surgery & surgery time is performed during a planned surgical session
 - Turnaround time - period between anaesthetic stop time of previous operation and into theatre time of current operation.
 -Underrun minutes - anaesthetic stop time that is more than 45 minutes BEFORE session end date time.
 -Overrun minutes - anaesthetic stop time that is more than 30 minutes AFTER session end date time.

Step 4: Data Analysis: Overview of the Findings

Problem: 30%-45% of WTN Theatre Unused Capacity



Step 8: Develop Countermeasures

Root Cause 19: No (sufficient) appropriate anaesthetic rooms/bays for commencement of cannulation/ blocks/spinal process

Proposed Solution: Increasing the Utilisation of WTN 4 Pre-operational rooms by re -purpose their use as an Anaesthetic rooms.

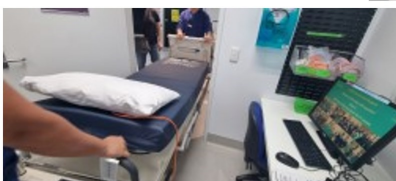
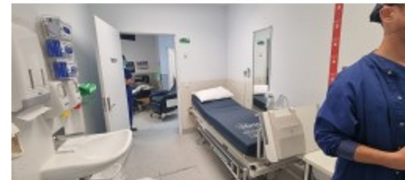
Anaest Room #1



Anaest Room #2

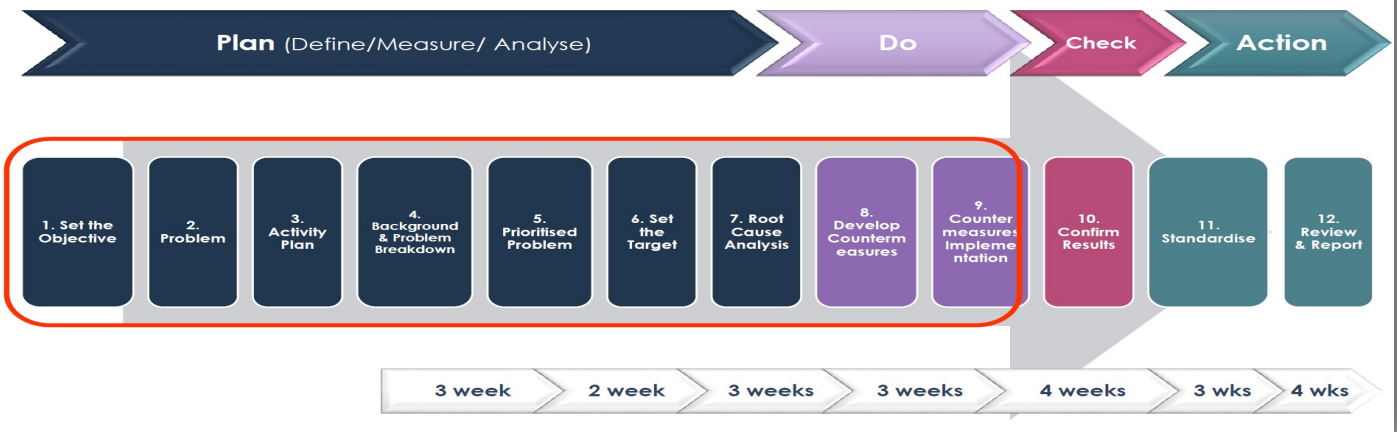


Anaest Room #3 & #4



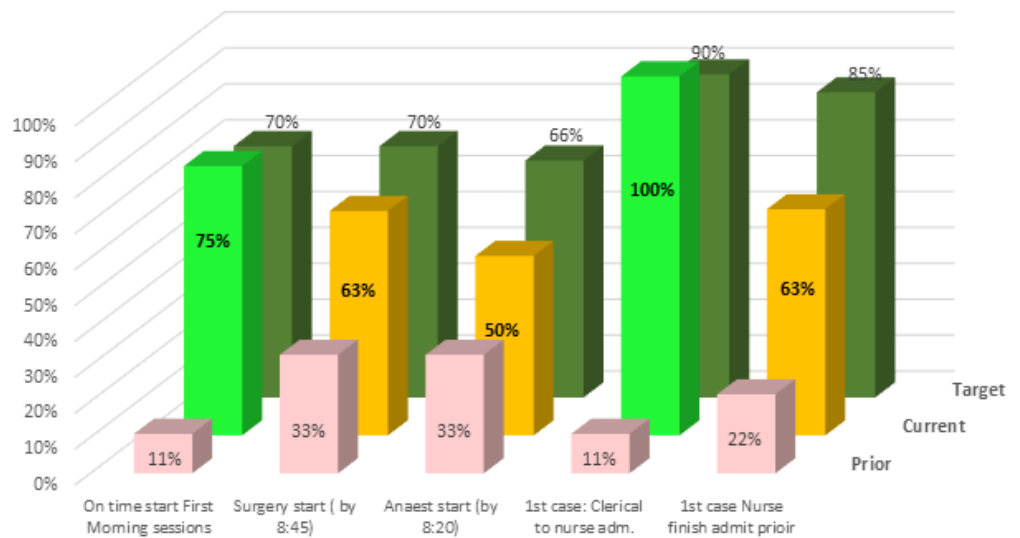
CLINICAL SERVICES

Improvement Process Overview – PDCA Steps



Week 8
report as at
21/12/23

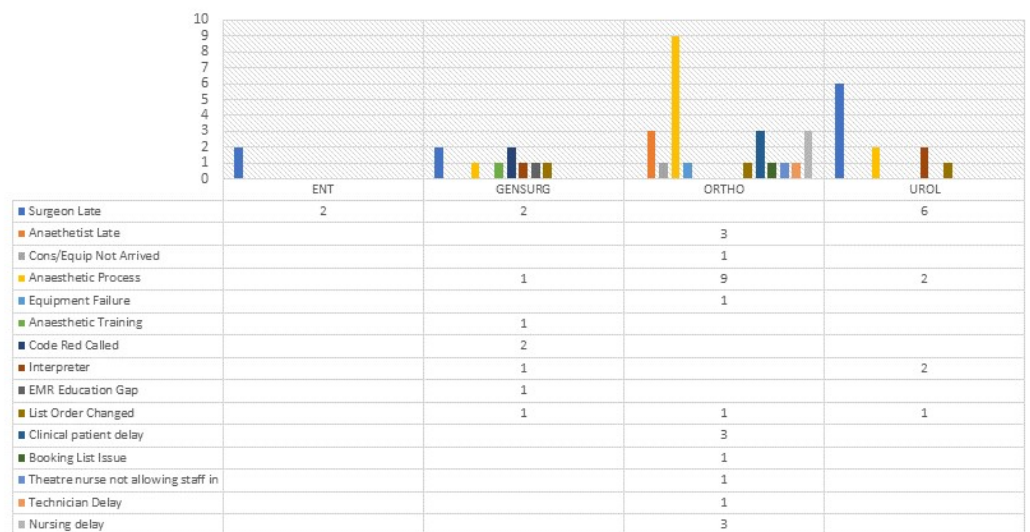
Weekly Target Achievement



As can be seen from the diagrams and graphs, this is the most comprehensive analysis of the underlying factors.

Moving forward, we plan to continue to report the results weekly to the relevant stakeholders to reach the stakeholder KPIs.

Reason for Surgery delay (>= 8:45AM) per speciality



WHOD.COM.AU

Written by ChatGPT with some prompts from Prof Phong Tran

Ever get that déjà vu feeling like we're stuck in a loop, endlessly circling the same issues? Well, blame it on the revolving door at Western Health—junior doctors doing the cha-cha every 5 to 10 weeks, registrars doing the tango every 6 to 12 months, and our administrative rockstars swaying to new gigs every few years. It's a real dance party, I tell ya!

And you know what's not a hit on the charts? Spending more time explaining current processes than

actually improving them. Enter our superhero solution for the year: the return of the unit's secret hideout, aka the password-protected website (WHOD.COM.AU). Our mission? Make sure everyone's on the same page, literally!

So, when a fresh face joins the party—let's say a new intern—Lidia sends them a virtual high-five in the form of a welcome email. In it, there's a golden link to their personalized starting page, where they'll find the VIP access to all the

cool departments, secret protocols, and life hacks for their role.

This website isn't just a digital hero cape; it's already causing ripples in the information-sharing pool. Fingers crossed it'll break the cycle of circling and actually move us forward—no dance moves required! ■

Western Health
Department of Orthopaedics

Staff Clinical Training and Education Research Calendar

Search ...

As a team, we provide exceptional orthopaedic care to the West

Current Unit Roles and Projects 2024 Calendar

07:30	X-ray Meeting Consultant Ward Round -
Monday, 8 January	
	Submit Annual Report
Friday, 12 January	
07:30	X-ray Meeting Consultant Ward Round -
Friday, 19 January	
07:30	X-ray Meeting Consultant Ward Round -
Thursday, 25 January	
	Receive Published Annual Report
07:00	Xray meeting
Friday, 26 January	
07:30	X-ray Meeting Consultant Ward Round -
Monday, 29 January	
18:00	Last Journal Club for Registrars
Friday, 2 February	
	Annual Audit - Numbers
	Last Day of Registrars
07:00	X-ray Meeting Consultant Ward Round -

Important Pages

- [RCT - THR Approach](#)
- [RCT - ACL](#)
- [Current Roles and Projects](#)
- [Registrar](#)
- [ERAS](#)

What's New

- [CT planning for Joint Arthroplasty](#)
- [Stryker Sports](#)

FOOTSCRAY HMO

Geography

Task	Location
Home ward	0700 in the Ortho Registrar offices Level 1 –except Friday's handover is at 0630 (because Unit Meeting in Mitchell Mavis Room or Auditorium is at 0700)
Morning meeting point	1 WEST
Your pager	Each HMO/Intern receives their own pager which you have for the entirety of the rotation; you should hypothetically only get paged when you're on the ward (on ward week)
Patient list	~15-35 patients (patients under Ortho and OrthoGerics bedcards)
Handover	0700 in the Ortho Registrar offices Level 1 – Tuesday – Wound Clinic and Clinic/Frac Clinic
Handover patient	Footscray – Level 3, enter via lifts in Level 1, opposite birth suite, corridor (1st floor) Williamstown – Level 1, corridor

In the heart-pounding world of surgical precision, strides forth a figure like no other—Dr. Duy Thai, the unyielding titan of shoulder orthopaedics. A scion of Vietnam's fiery spirit, he's a force to be reckoned with, transcending borders and limitations. With the grace of a masterful conductor, his surgical symphonies mend the broken sinews of humanity, each movement a dance of life and death. But it's not just his scalpel's edge that keeps hearts racing—it's his unquenchable zeal for training the next generation of warriors in the theatre of surgery. Behind the wheel of his Tesla, he accelerates into the unknown, a high-speed chase towards enlightenment, where the road is as uncharted as the rush of adrenaline coursing through his veins. In a world where every incision could write destiny, Dr. Duy Thai stands tall, a relentless action hero sculpting the future with every cut.

In the shadows of the operating room, where the line between healing hands and vigilant guardians blurs, stands a figure whose presence is as formidable as it is enigmatic. Dr. Matthan Mammen, an orthopedic surgeon by day and a vigilant night runner, weaves the essence of a caped crusader. His physique is a testament to unwavering discipline, each sinewy muscle a symbol of resilience. Known only to him, echoing the footsteps of a certain Dr. Mammen, Dr. Mammen's story unfolds like a tale from the annals of legend, where the boundaries between ordinary and extraordinary fade into the night.

Daily Duties

INTERNS

Supervisor: Mr. [Brett Moreira](#) | brettcmor@gmail.com | 0402 344 463

Director of Training – Orthopaedics – Mr. [Duy Thai](#) | d.thai@orthowest.com.au | 0409 015 117

Welcome to Orthopaedics

We recognise for some of you this may be your first surgical rotation, or perhaps your first rotation as a doctor, so firstly – CONGRATULATIONS!

We hope you can find this rotation to be a stimulating and fun experience. We welcome any feedback on ways we can improve the rotation and please do not hesitate to approach any of us (HMOs, registrars, consultants) for advice or concerns.

If you're interested in pursuing orthopaedics, have a chat to us, so we can advise and assist you to progress!

What does the unit do?

- First and foremost – we provide exceptional orthopaedic care to patients of the West
- Research – Check out our [research tab](#) to read through our recent publications. If you're interested in getting involved, please contact Phong Tran or alternatively any of the authors of publications you found interesting/would like to get involved in.
- Friday Unit meetings + audits
- Intern/HMO teaching every Friday morning
- Annual soccer tournament – we'd love to have you involved

Roster

	Mon	Tues	Weds	Thurs	Fri	Sat	Sun
AM	0730 WR + jobs (If able) SH paeds frac clinic	0730 WR + jobs FH wound clinic	0730 WR + jobs theatre	0730 WR (If able) SH paeds frac clinic	WF XR Co nt (in variable order)	ward cover	ward cover
PM	jobs /theatre	FH fracture clinic	rostered half day	jobs /theatre	jobs /theatre	OFF	OFF
After Hours Cover (5-8pm, x2 a week)							

VIRTUAL FRACTURE, OAHKS AND PAR CLINICS

Bhavna Trivedy– Advanced Practice MSK Physiotherapist

VIRTUAL FRACTURE CLINICS—ADULTS & PAEDIATRIC

Western Health’s Virtual Fracture Clinic (VFRAC) had another busy and successful year virtually managing patients with a variety of fractures and musculoskeletal injuries. The service has continued to experience an increase in demand over the last 12 months, with referral numbers consistently increasing each year – please see below summary and 2022 comparison.

While EMR reporting currently limits our ability to review the annual percentage of total referrals managed by VFRAC for 2023; review of our pre-EMR data (January – June 2023) shows we **continue to consistently manage~ 30% of total referrals in Adult and Paediatric Virtual Fracture Clinic** (ISQ compared with January – June 2022).

The Adult and Paediatric VFRAC teams sincerely thank the Orthopaedic team (in particular, the rostered consultants

and Orthopaedic registrars), for their ongoing support and dedication this year which has been integral to our successes. VFRAC and P-VFRAC continue to be great examples of an extremely successful collaboration that has allowed Western Health to achieve the best care for our patients.

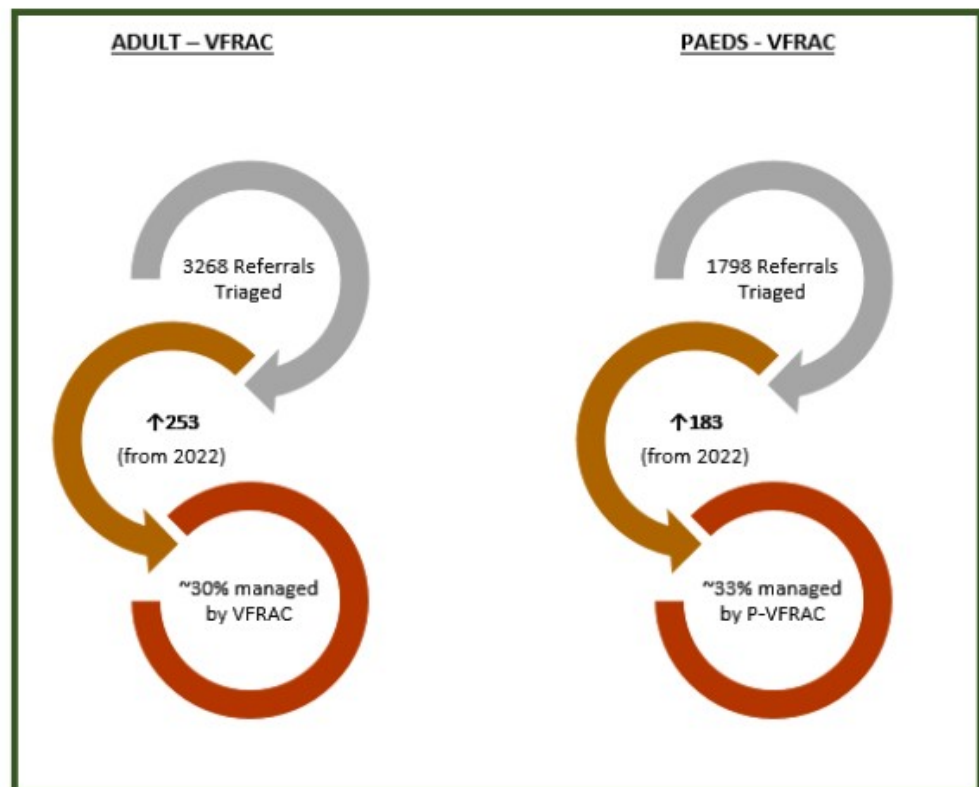
ORTHOPAEDIC PHYSIOTHERAPY-LED CLINIC

After limited capacity to see patients in the Orthopaedic Physiotherapist-led clinic during the pandemic, we started addressing

the waiting list in May this year, with 511 patients requiring appointments at the time. An audit performed by RMC & clinicians significantly reduced this waiting list resulting in all patients on track to be seen by mid-January 2024.

This year we trained two new Advanced Practice Physiotherapy clinicians. Carlos Bello has been successfully credentialed and Lydia Chew will complete her training next year.

Thank you to the Orthopaedic team for assisting with clinical reasoning support for the patients seen in this



While EMR reporting currently limits our ability to review the annual percentage of total referrals managed by VFRAC for 2023; review of our pre-EMR data (January – June 2023) shows we **continue to consistently manage~ 30% of total referrals in Adult and Paediatric Virtual Fracture Clinic** (ISQ compared with January – June 2022).

KEY ACHIEVEMENTS 2023

01

WELCOMED TO OUR TEAM

- Adults - Amanda Angus, Praveen Mulinti & Christina Zaki
- Paeds - Tom Bicknell



02

ADULT VFRAC - RECOMMENCED MANAGEMENT OF GP REFERRALS

- Re-commenced August 2023
- 107 referrals managed to date



03

IMPROVED MANAGEMENT CONSISTENCY

- Western Health Emergency Department Management of Adult Fractures & Soft Tissue Injuries Guideline



04

INCREASED OUR PROFILE

- ED and Orthopaedic department presentations



05

PROGRESSED OUR P-VFRAC RESEARCH PROJECT

- Evaluating user acceptance of Virtual model of care in Paediatric patients with simple fractures & impact on health service outcomes
- Qualitative interviews commence in 2024



VIRTUAL FRACTURE, OAHKS AND PAR CLINICS

Bhavna Trivedy– Advanced Practice MSK Physiotherapist

clinic. We look forward to continuing to foster this positive and collaborative relationship into the future.

NWBC – NON-WEIGHT BEARING CO-ORDINATOR

The Non Weight Bearing (NWB) Coordinator role was introduced at Western Health in late 2021, and since this time it has made a significant impact on the NWB patient cohort and patient flow through Western Health. In October, 2022, a business case for a permanent 0.8 EFT NWB Coordinator was approved at the executive level which has meant more access for our patients and their families.

Andrew Mangan stepped into the role in early 2023 and has done a fantastic job of showing the efficacy of an advanced practice physiotherapist in the inpatient setting. He is the second person to be credentialed in the role, which has created greater flexibility and coverage. In 2023, the NWB Coordinator has provided care for more than 200 patients and provided over 1,600 occasions of service across all three Western Health sites. Furthermore, we have been able to provide on-going care and advice for patient's being discharged to Dousta Galla Aged Care Home under the brand new NWB Pathway.

The highlight of the 2023 was the presentation of the NWB Coordinator project at the National Allied Health Conference in August. Kirsty May presented on behalf of Thomas Bicknell & Sophie Gore, and feedback from the audience was overwhelmingly positive.

A role like this cannot be successful without great support, so we would like to say a huge thanks to the Orthopaedic team for the guidance in the last year!

PAEDIATRIC ADVANCED PRACTICE CLINICS

Our Advanced Practice Physiotherapists work under the supervision of Mr. Chris Harris and Mr. Ben Johnson in delivering quality, evidence based care to babies and children across multiple Paediatric clinics.

Our team consists of Julianne Pegler, Melinda Mahady, Amelia Marshall (currently on Maternity Leave), Sam Wills and Cassandra Skilton. We provide Orthopaedic assessment and treatment to babies and children with developmental dysplasia of the hips (DDH), congenital talipes equinovarus (CTEV), congenital vertical talus,

neurogenic foot deformities, and general Orthopaedic conditions requiring Orthopaedic Assessment and treatment such as toe walking and postural variations.

We lead DDH clinics, alongside the Hip Sonographers and Orthotists from OAPL to provide streamlined management of DDH. We similarly lead CTEV casting clinics, providing Ponseti casting, casting for relapsed CTEV, pre and post-surgery; such as tendon achilles lengthening procedures and tibialis anterior tendon transfer surgery.

Transition to EMR 2.1 has limited our ability to share accurate throughput data but we look forward to sharing this with the department soon once this has been established.

Our sincere thanks goes to Mr. Harris and Mr. Johnson who continue to support our team and our collaborative approach to quality patient care. ■



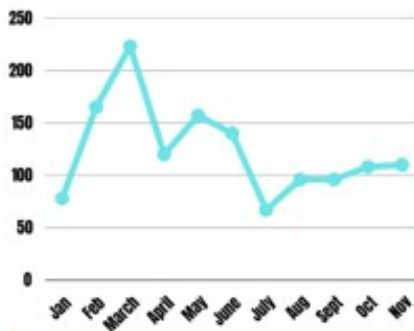
2023 OAHKS

Osteoarthritis hip and knee service

Staff uplift

Naveena, Nicola and Christina completed their OAHKS training and joined Lydia in providing the 2023 service

Surgical reform funding continued



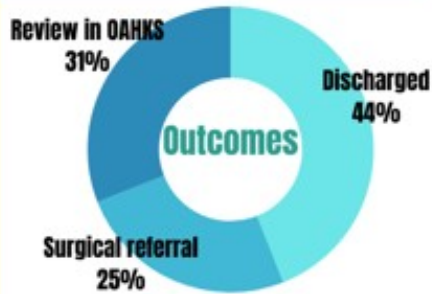
Wait list erased

400 > 0

>300 Cat3 Hip and knee OA patients moved from the orthopaedic wait list to OAHKS

1450 appointments provided

Patient choice of SH or FH appointment



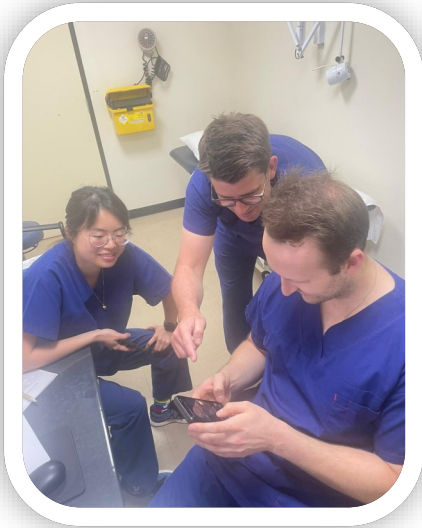
Thank you for the ongoing support of this service

Ongoing projects

- Consumer feedback
- Strengthening community referrals for conservative care provision

ADULT FRACTURE CLINIC

Dr Ben McElwee — Unaccredited Registrar



Any doctor who has rotated through (or worked countless hours within) an Orthopaedic fracture clinic knows that it is unlike most other clinics in healthcare. In order for flow to occur and excellent patient care to be achieved, there is a large inter-disciplinary group which is required to work in cohesion including doctors, nurses, technicians, physiotherapists, administration, and radiographers.

Adult fracture clinic at Footscray Hospital is always a busy day and requires a 'buy-in' from all staff to best serve our patients. I felt privileged to work with a team that prided itself on delivering excellent care every Tuesday to the people of the West.

This year, we had to navigate the complex world of transitioning through the "Go Live" period of

EMR 2.1 which occurred in June. It was a tumultuous few weeks which made our already busy clinics seem all the more chaotic as we accustomed ourselves to the new way of doing things. Over time, the Super User team with everyone involved made numerous changes to clinic flow in order to minimise wait times and ensure that patients were not lost to follow-up with these procedures even evolving to this day. Of particular importance was the initial transition away of all patient labels when 'picking up' a patient. This led to much confusion and delays in seeing patients. Eventually, this system was re-introduced in parallel to the EMR system which greatly improved patient flow. I would like to give particular thanks to Olivia Vaccaro, Footscray outpatient clinic ANUM, who was invaluable in working with the team in optimising the way in which our clinic flowed, ultimately decreasing wait time, improving patient care, and increasing staff satisfaction.

Perhaps the most important revision to the clinic 'rules' that the registrars implemented was the



Lily Salehi showing the team how its done with her patient seeing prowess

recent addition of 'The Great Label Ladder' whereby each registrar would proudly show off the number of patients seen each day in the form of a list of patient labels on their door. Each Tuesday, the clinic nurses were better able to keep track of which doctor saw each patient through this method and an informal 'victor' was able to be named each week as to which doctor saw the most patients!

Due to spend another year at the West in 2024, I look forward to further revising the way that we operate in this busy clinic. ■

PAEDIATRIC FRACTURE CLINIC

Dr. Cheryl Lee — Unaccredited Registrar

Paediatric Fracture Clinic in Joan Kirner has been an enjoyable and educational experience. The opportunity to provide care to children in the West is a delight as is learning from Dr Chris Harris and Dr Ben Johnson.

The algorithm on the wall for fracture management is an invaluable tool. We are always asking ourselves in clinic “can I leave the bone where it is?”, and if we don’t ask ourselves, Mr Harris will be sure to ask us. “All power to the physis” and “union means one” are pearls I will never forget.

Paediatric fracture clinic is not only an opportunity to learn the science of medicine but also the art of

medicine. Over the year, we have learned the art of communicating to patients and their parents about their fractures and their treatment options. The importance of shared decision making has been impressed upon us and having these discussions with patients and parents about their angulated distal radius fractures is a weekly discussion we all look forward to. While these discussions can be time consuming, having the patients and parents leave the room understanding their injury, feeling confident with their treatment plan and satisfied with their appointment despite occasionally long waiting times, is the standard of care we aim for and will continue to

provide.

Coordinating fracture clinic is a huge task which requires collaboration between nurses, plaster techs, physiotherapists, radiographers, doctors and admin staff. I would like to thank all the members of our team who work tirelessly to provide the best care to our patients and ensure they have a pleasant clinic experience. I frequently have patients tell me they prefer to wait to see a doctor in paediatric fracture clinic instead of following up with their general practitioner which is a testament to the standard of care we collaboratively provide and is just another reason why West is Best. ■



ORTHOPAEDIC TECHNICIANS

John Kinealy — Senior Orthopaedic Technologist

As 2023 comes to an end, I can say without a doubt the highlight of the year for me was looking at the WhatsApp Christmas party photos and seeing Phong Tran dressed up as Barbie! What a stunner. If you ever get tired of orthopaedics Phong, I think you could give Margot Robbie a run for her money - you are a natural. It looked like a fun night, and I'm sorry I missed it. Of course there must be a special mention for Duy Thai and Dan Sydenham - equally outstanding outfits.

2023 has been a great year for our team. New recruit Sarah Burke commenced with us towards the end of last year. Sarah has fitted in very well with the team, and is progressing nicely. The team now consists of Kris Martinez, Mark Randall, Ana Villalta, Jade Varvodic, Jacob Dass, Sarah Burke and myself.

We have been kept busy with the usual training of the interns, medical students and the emergency department fortnightly training. We also participated with the emergency department registrar training. The training sessions have been well attended and well received. I need to thank my colleagues Kris Martinez and Jade Varvodic for their continued assistance and support in delivering these teaching sessions. We have had a number of emergency department Nurse Practitioners attend our clinics to assist in their learning. We continue to support the physiotherapy department by allowing physios to attend the clinic to gain more experience and sign them off on specific tasks, such as cast removal with the oscillating saw, as well as fitting of orthopaedic devices.

The

new EMR has posed a continual challenge for us to navigate since go-live, however we hope to have a more positive experience with it in the coming year as it becomes more familiar. The support of the doctors has been incredibly valuable in helping our EMR transition run more smoothly.

We look forward to the future of working at the new Footscray hospital. In preparation for this we have been trialing a new oscillating cast saw. These new machines have many benefits over the old outdated type and we hope to procure these new devices for the new hospital (if not sooner).

We continue to work well with the orthopaedic registrars, residents and interns. We value their candor and willingness to always lend a hand when discussing patient management. We are continuing to have a few hiccups with supplies post-pandemic. We are improving our ordering system, which we hope will help to streamline supplies. To keep up the standard of maintaining supplies, we are training both Jacob and Sarah to support Jade in this difficult and challenging role.

Our colleague Jacob Dass got married in November to his beautiful bride Maddie. They



CLINICAL SERVICES

both looked stunning and the event went off without a hitch. They recently returned from their honeymoon in the U.S., where they had a fantastic time.

We couldn't send off 2023 without a huge thank you to our manager Marcus Storey for his commitment and dedication to our team, as I am sure he is with the many staff under his direction. It is a pleasure to work with him, and his 'nothing is too much trouble' attitude is both refreshing and enlightening. Thank you Marcus, for all of your hard work and support throughout the year. Special thank you also to Prof. Phong Tran and the orthopaedic department for their support throughout this year.



Lily Salehi showing off the artistic talents of our patients



We look forward to working with Marcus, the orthopaedic team and the rest of the wards, departments and campuses that make up Western Health in the year that will be, 2024. ■



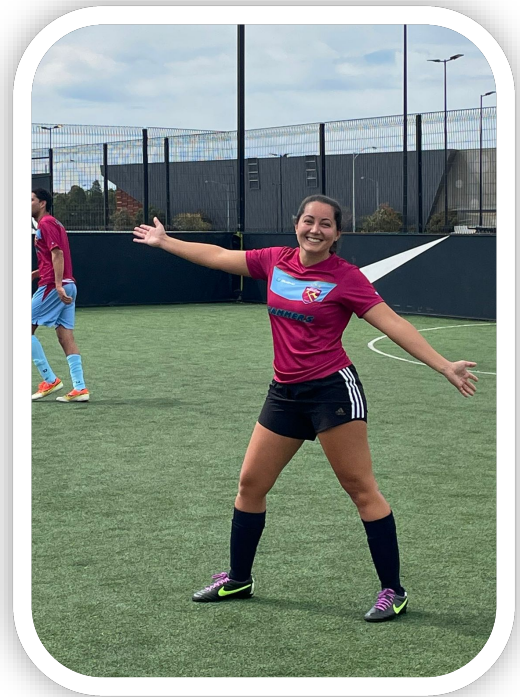
ELECTIVE SURGICAL BOOKINGS REPORT

Aleksandra Cecati & Jessy Doherty — Orthopaedic Surgical Liaison Nurses

In the last two months, the elective bookings office has been super busy preparing patients for their life changing surgeries. Currently we have under 1000 patients on our waitlist. We have two full time Elective Orthopaedic Liaison Nurses who work together to ensure Western Health's patient's are being booked according to the ESIS policy. Our role is very busy as we prepare and audit our patient's on a daily basis.

We thoroughly assess the patient's histories and make appropriate plans for them to mitigate cancelations on day of surgery. We work closely with the Unit, PAC, Outpatient's and the research team to ensure all pre-operative planning has been met for a smooth perioperative experience for the patient. One issue that we face is the lack of Footscray lists for the orthopaedic surgeons. This is a working progress. In the mean time

we will endeavor to swap campus's for surgeons where able to and move patient's to other surgeon's lists if suitable. Thankfully, we still have a Government agreement where we can refer suitable patient's to the private sector to ensure our patient's are being operated on in a timely manner. Our goal is to continue to book our patient's on for their surgery in the desired time frame. ■



Top Left: Jessy Doherty and Aleks Cecati getting into the Xmas spirit

Top Right: Elise Stoaidin hammering it out on the soccer pitch

Bottom Left: Ben McElwee and Jessy Doherty showing off Ben's Christmas sweater.

TRAUMA SURGICAL BOOKINGS

Jessy Doherty - Orthopaedic Trauma Surgical Liaison Nurse

This is my second year in the role of Surgical Liaison Nurse for Ortho Trauma. My role has changed slightly since returning from Maternity leave. As well as managing the Ortho Trauma Outpatient bookings, I now manage half of the Ortho Consultant's Elective Lists.

My role also heavily involves being an advocate for all our Fractured Neck of Femur inpatients. And for these patients to have surgery completed within the 36 hour desired time frame. I attempt to do this by getting extra lists for our team and escalate any issues or setbacks which may arise that may impact our team from getting these patients into Theatre.

I follow the journey of each NOFF patient from the moment they are admitted up until their surgery is completed. I investigate what is the daily delay for each patient, and investigate what prevents them from getting to surgery within the 36 hour time frame. I then present this data daily to Western Health executives, the 3 Ortho Geri Teams and Dan Sydenham. I also present this data at our monthly Fractured NOFF committee meetings.

The goal of obtaining this data is to flag and discuss the delays/ issues that arise in getting these patient's into surgery within a timely manner.

This is discussed with Executives and changes to practice are implemented across many areas within Western Health. We need to do all we possibly can to advocate for our patients and for our team to provide the best care to our most vulnerable patients.

I have really enjoyed transitioning back into the team from my Maternity Leave. It has been a bit of juggling act returning to a full time position with a Toddler, but I feel I have made it look easier than it was. It didn't take me long to hit the ground running and get back into it. I feel as though I have established great professional and respectful relationships with all the Intern's, HMO's, Registrar's, Consultants and Theatre Scheduler's. I have felt welcomed by the entire Unit and it is really great knowing I am appreciated and supported.

It is great having Aleks back – we are the dynamic duo. This role requires you to be organised, to think quickly on your feet and to know the processes required to book patients in a safe manner and within our ESIS guidelines. There are times when this position can be challenging. Finding patients to fill lists at the last minute due to cancellations and moving patients due to Trauma's. Aleks and I also have the added pressure of auditing the 1000

patient's on our Orthopaedic waitlist – following up on their outstanding tests and appointments, also determining if surgery is still required. This can be a time consuming process.

It brings me a great sense of satisfaction when we book in a long waiting patient, who has been waiting over a 1000 days for their surgery. I always joke around in our office that I need a tutu and a wand to keep my status as the Orthopaedic Fairy Godmother - giving patient's new hips and knees that they have been so patiently waiting for.

Just a personal note about me – I really love this role. I feel that my 13 years of Ortho ward experience, my personality and work ethic have moulded me to be the perfect fit. I am extremely open to feedback and strive myself on personal growth. I always aim to give 110 percent every day. Outside of work I really enjoy watching movies, listening to music, karaoke and laughing. Just a note for future reference, I drink a soy latte, enjoy a flavoursome gin and really like a Picnic bar! ■

ORTHOANSWER

Dr Toan Phu– Unaccredited Registrar



Orthoanswer is an easy to understand website that provides patient information about

Orthopaedic Surgery & conditions. It is an education tool used to empower patients and their

families with health education. It covers topics including orthopaedic conditions, symptoms,

risks, benefits and alternatives to surgery with a focus on the patient journey and experience.

Orthoanswer is hosted by Western Health's Orthopaedic Department with collaborations from

various health professionals at Western Health. Orthoanswer was created and coded by hand

as one of Prof. Tran's projects during fellowship. Since then, the website has been revamped

and converted into WordPress by Registrar Toan. This allows for a more user-friendly platform

and makes it easier for patients to navigate the website. It offers tools such as a navigation

menu and instantaneous translation into 23 languages with a single click! Research assistant Eugenie has also converted the website links into QR codes which makes it

much easier for patients to access during patient education at Clinic D. Try the QR code below:

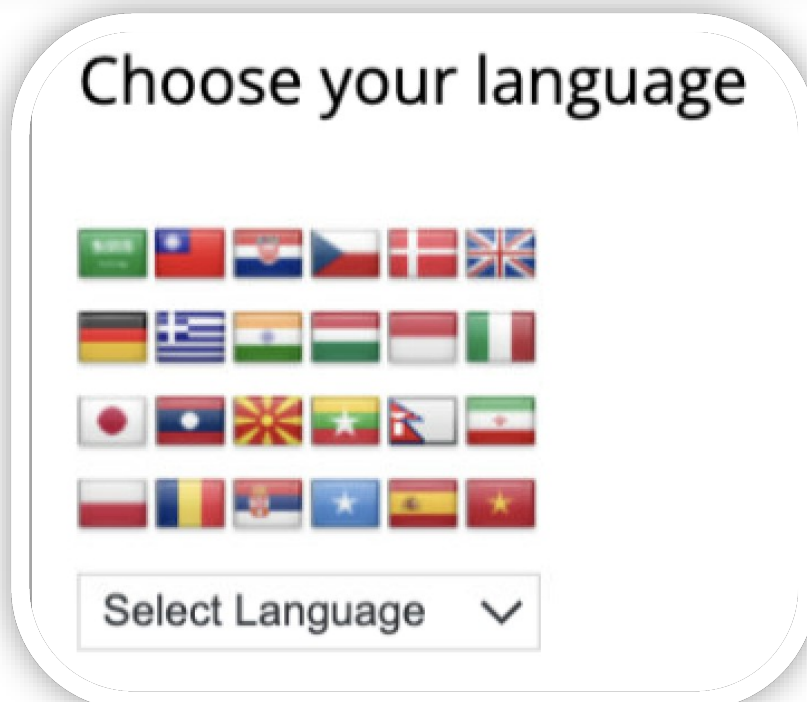


ORTHOANSWER

Dr Toan Phu– Unaccredited Registrar

A previous study at Western Health has found that using Orthoanswer as an augment during the informed consent for surgery process is effective in improving patient knowledge and satisfaction. Non-English speaking patients tend to have lower health literacy and poorer understanding of their health conditions. We are using the translated Orthoanswer website and running a randomised control trial to see if we can

improve the health knowledge of our non-English speaking patients. With Western Health's extensive culturally and linguistically diverse population, this is the perfect centre to run this study. The future is to streamline and integrate Orthoanswer as part of our surgical consent and booking process, clinic D and pre-admission clinic.



DIRECTOR OF TRAINING REPORT

Dr Duy Thai



All clinical services had essentially transitioned back to normal during 2023 after lots of hybrid online meetings and teaching sessions in the previous years. Case conferences were back in person and the AOA clinical bone schools and fellowship exams were once again conducted with real patients. Western Health even managed to host the AOA Trial Exam in March 2023 in preparation for the real Fellowship exam which was brilliantly organised by Lachlan Wight (who was previously here as an unaccredited registrar). A big thank you to all those involved in the running of the trial exams.

Once again, the support our unit provides to the accredited trainees paid off with the successful passing of the Fellowship exam for Peter Wong in the first half of the year and Mike Millar in the second half of the year. A big congratulations to the two of you in overcoming this hurdle and all the best for your

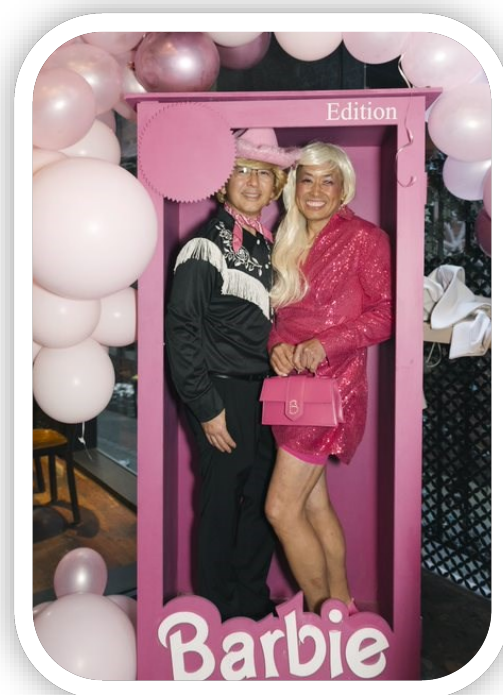
future careers.

We welcomed Nick Marson in the second half of 2023 as our Transition to Practice registrar and Nick has been invaluable in teaching the junior registrars and picking up operating lists to help the unit get through the workload of treating patients on the elective waiting list. All the best for Nick as he transitions to consultant life in Tasmania. We also welcomed Tim Maher as our Intro to training registrar in the second half of 2023 and Tim will be continuing with us into 2024.

We had 8 unaccredited registrars for 2023. Returning from previous years were Sean Griffiths, Quoc Toan Phu, Phoebe Walker, Lily Salehi and Andrew Griffith. We warmly welcomed new unaccredited registrar recruits from other health services into the Western Health family this year: Min Tang, Ben McElwee and Cheryl Anne Lee. It has been very heartwarming to see such a fantastic group of people get on so well together. All of you have supported, encouraged and learnt from each other over the year and taking a road trip to Warrnambool together is a culmination of the camaraderie of the group. Ben was awarded

the Melbourne University Western Clinical school best registrar teacher by the medical student cohort which is a fantastic achievement. Ben's dedication to teaching also extended beyond the medical field in his ability to teach the essential life skill of changing a car tyre to one of the other unaccredited registrars.

The selection process for accredited training in 2024 was fraught with controversy this year. Changes to the selection process with introduction of a Situational Judgement Test and changes to the way references were handled made things challenging for all involved. For those who were unsuccessful, the unit has made changes to the registrar feedback assessment



Mr Thai and Prof Tran on their way to XRM

EDUCATION AND TRAINING

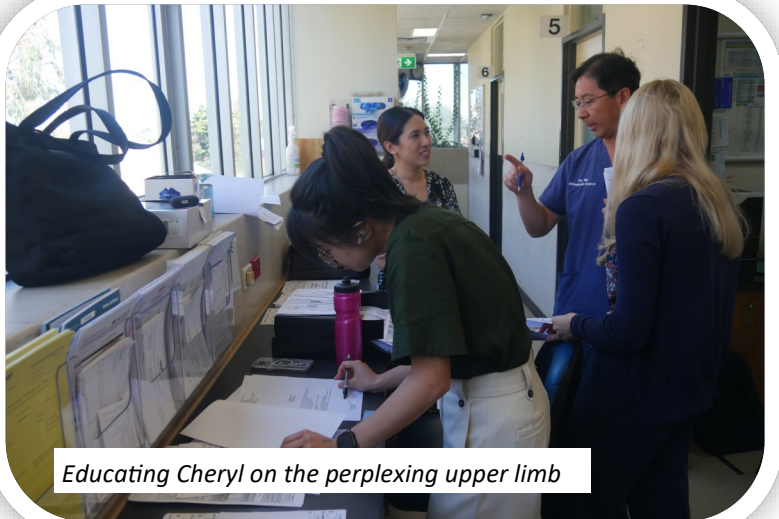
forms which were introduced in 2022 to better reflect what the AOA is looking for in the references and hopefully this will help with the selection process next year. We will continue to support the unaccredited registrars with regular interview practice sessions during the year in the lead up to the selection interviews.

A big congratulations to Min Tang and Phoebe Walker who were successful being selected for the Orthopaedic training programme in 2024. Phoebe has been through the Western since a medical student and it is always rewarding for the Unit to see someone we have nurtured over the years make it through. Min has brought an unmatched enthusiasm into the unit and her selection onto the programme is well deserved. We wish you both a bright future orthopaedic career and hopefully the Western will provide you with memorable moments to take with you on your journey. ■

Lachlan Wight showing Mr Thai how to log into EMR



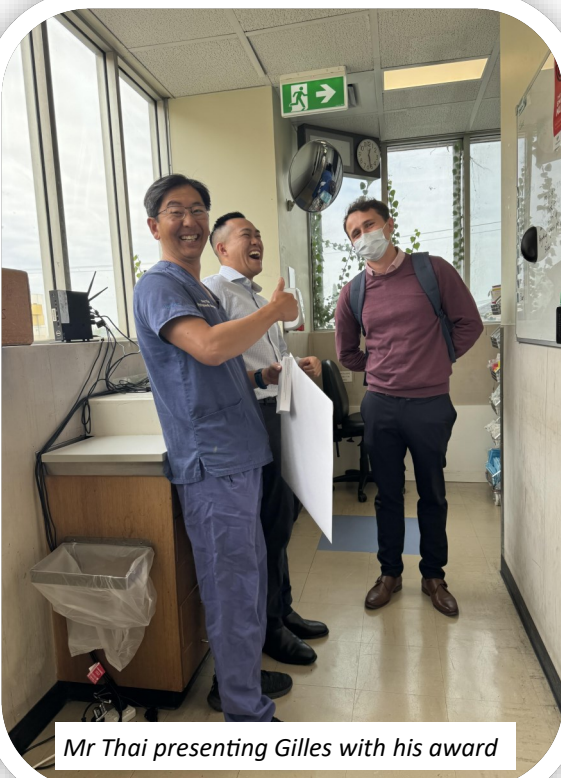
Educating Cheryl on the perplexing upper limb



Mr Thai visiting VU during Journal Club



Mr Thai presenting Gilles with his award



TRANSITION TO PRACTICE

Dr Nick Marson — Accredited Orthopaedic Registrar

I'm grateful for the experience I've had at Western Health during the Transition to Practice (TTP) stage. Witnessing the intricacies of senior consultants' work and independently managing lists have developed my leadership skills and surgical confidence. Guiding the registrar team and providing feedback were not only rewarding but also solidified my own knowledge. Thanks to Western Health's unwavering support, I feel more prepared to begin my fellowship and embark on my career as a skilled and confident orthopaedic surgeon. While AOA holds the reins of TTP, Western Health's contribution has been invaluable in shaping my future. ■



No caption needed really



The registrar crew taking a well earned lunch break at Ebi



Nick Marson after accidentally ingesting pepper

BONE SCHOOL

Dr Mike Millar — Accredited Orthopaedic Registrar



Bone school involves regular weekly Friday presentations by accredited registrars, supervised by a nominated consultant on various topics in the curriculum through the year. On Saturday mornings each month, bone school also has a clinical component; accredited hospitals in Victoria host a morning session where consultants test the

mettle of upcoming exam sitting candidates by having them examine patients and deliver feedback to improve their technique. Previously due to COVID restrictions, these sessions would be held on zoom, however in 2023 face to face sessions returned.

This protected mandatory training time, is a vital component of acquiring knowledge and skills to help pass the ultimate test – the FRACS exam. The penultimate test of bone school, is the trial clinical exam, this year hosted by Western Hospital on March 25th of 2023. The trial exam is used as a benchmark to see if senior trainees are ready to sit the fellowship exam – so stakes are high. Substantial time and effort was provided by the registrars and consultants at the

West to organise an exam which not only mimicked the stressful conditions of the real deal, but also was so well put together that those accredited registrars present for the exam unanimously rated it as the best Saturday bone school of the year.

A big thanks to registrar Lachlan Wight for organising the trial exam, all of the other fantastic registrars who gave their time to « bulldog » candidates from room to room, and to the consultants at the West, whose clinical accumen and examination prowess set a standard so high that to be rivalled only by the famed Miller’s review course. ■



EDUCATION AND TRAINING

CASE CONFERENCE

Case conferences returned in 2023 with the cessation of Covid restrictions, held most Friday mornings during departmental meetings. This return to a new normal was great for two factors. Firstly, consultants bringing in complex cases for unit discussion and consensus opinion optimizes care for patients, and secondly, the FRACS exam reinstated real patients for clinical examination for the first time since 2020 so senior registrars had ample training of being under the pressure examining complex cases in preparation for the fellowship exam. The fact that both senior registrars were successful in passing the fellowship exam is a testament to the excellent teaching and mentorship from the consultants at Western Health. ■



17th February - Prof Tran	Dr. Peter Wong: 55 year old with hip pain post GT intraop fracture during total hip arthroplasty with broken wire insdie
10th March - Mr Thai	Dr. Peter Wong: 40 year old with elbow contracture after suffering burns as a child
5th May - Mr Crowe	Dr. Peter Wong: 35 year old with shoulder posterior instability
12th May - Mr Jackson	Dr. Peter Wong: 63 year old with loose tibia tray post revision TKR
19th May - Mr Mammen	Peter Wong: 66 year old with elbow stiffness post trans olecranon terrible triad operative fixation
23 June - Prof Tran	Dr. Mike Millar: 36 year old with left shoulder post traumatic arthritis
18 August - Mr Tulloch	Dr. Mike Millar: 50 year old with knee stiffness post multiligamentous injury
24 November - Mr Jackson	Dr. Tim Maher: 62 year old with bilateral knee stiffness
15th December - Mr Harris	Dr. Tim Maher: 67 year old with hip pain post dysplasia

REGISTRAR FEEDBACK FORMS

Dr Ben McElwee — Unaccredited Registrar

Over the course of the past couple of years, the implementation of a structured feedback process for orthopaedic registrars within our unit has proven to be a resounding success. This innovative approach, spearheaded by our own Mr Duy Thai, has significantly enhanced the educational experience and professional development of our registrars. The feedback forms, meticulously designed to cover various aspects of clinical performance, communication skills, and procedural competence, have provided a comprehensive framework for constructive evaluations.

Each unaccredited registrar was tasked with gaining regular feedback from their consultants in

order to not only improve their own skills but also allow for fair referencing during the AOA 21 applications. The competencies on the form aimed to reflect those needed to become an excellent surgeon including medical and surgical expertise, technical proficiency as both an assistant and surgeon, performance under pressure, communication and teamwork, professionalism, and a self-appraisal.

After the 2023 intake for the training program was released, the revision in application process necessitated a change in the way we attain feedback. Of note, the core competencies now directly reflect those of the AOA 21 (communication, medical and surgical expertise, teamwork,



professionalism, leadership and organisation, advocacy, and education and research) and seek to rank registrars in comparison to a first year AOA trainee. Furthermore, it allows for specific examples which will assist in the reference stage of applications.

This change, driven by Mr Thai and Prof Tran, shows an in-depth understanding for the process of Orthopaedic applications and shows a true care for their registrars. I would encourage all registrars to seek regular feedback using these forms and hope that it allows for a fair reference system and drives significant improvement in the quality of registrar within this unit. ■





Registrar Progress Assessment Form

REGISTRAR:

ASSESSOR:

DATE:

Competency - Communication:		
<ul style="list-style-type: none">• Demonstrating empathy when dealing with patients/family• Communicating with clarity and in an appropriate tone which encourages confidence & understanding• Actively seeking and accepting feedback		
Below level expected of 1 st year trainee	At level expected of 1 st year trainee	Above level expected of 1 st year trainee
Provide specific examples:		

Competency - Medical and Surgical Expertise:		
<ul style="list-style-type: none">• Demonstrating comprehensive knowledge of basic sciences• Demonstrating technical proficiency and quickly learning new skills• Demonstrating awareness of own limitations and insight into personal performance• Completing precise, thorough and perceptive assessments with minimal supervision• Selecting appropriate investigations and accurately interpreting results		
Below level expected of 1 st year trainee	At level expected of 1 st year trainee	Above level expected of 1 st year trainee
Provide specific examples:		

EDUCATION AND TRAINING

Competency - Teamwork and Conflict Management

- Respecting the contribution and views of all team members
- Openly accepting direction, suggestions, and criticisms
- Demonstrating careful and safe handovers
- Congeniality and willingness to help out even if personally inconvenienced
- Managing conflict well
- Thinking ahead and maintaining efficiency “when the going gets tough” and seeking assistance when needed

Below level expected of 1 st year trainee	At level expected of 1 st year trainee	Above level expected of 1 st year trainee
--	---	--

Provide specific examples:

Competency - Professionalism:

- Being punctual and reliable
- Being contactable and responding appropriately
- Demonstrating cultural awareness and sensitivity
- Demonstrating dependable character traits such as carrying out instructions and meeting deadlines and expectations
- Demonstrating knowledge of ethical principles and practices
- Maintaining good documentation even when busy

Below level expected of 1 st year trainee	At level expected of 1 st year trainee	Above level expected of 1 st year trainee
--	---	--

Provide specific examples:

Competency - Leadership & Organisational skills

- Managing care of patients well
- Helping to ensure a safe working environment for colleagues
- Enthusiastically teaching engaging, logical and well-prepared content on a regular basis

Below level expected of 1 st year trainee	At level expected of 1 st year trainee	Above level expected of 1 st year trainee
--	---	--

Provide specific examples:

EDUCATION AND TRAINING

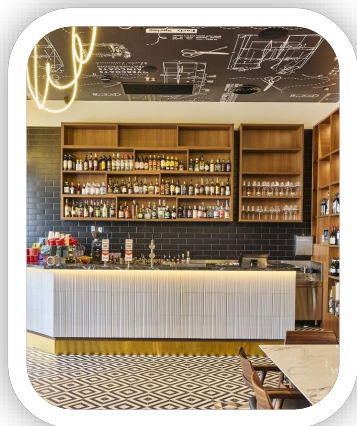
Competency - Advocacy		
<ul style="list-style-type: none"> • Advocating for patients in need • Being available to junior doctors for advice and assistance • Demonstrating cultural awareness and sensitivity 		
Below level expected of 1 st year trainee	At level expected of 1 st year trainee	Above level expected of 1 st year trainee
Provide specific examples:		

Competency - Education & Research		
<ul style="list-style-type: none"> • Actively participating in essential learning and knowledge acquisition • Commitment to continuing professional development and staying abreast of current advances in orthopaedic surgery 		
Below level expected of 1 st year trainee	At level expected of 1 st year trainee	Above level expected of 1 st year trainee
Provide specific examples:		



BEERS AND TEARS

Dr Min Jia Tang — Unaccredited Registrar



A pivotal moment in a registrar's career is the interview process leading to acceptance into the AOA for official training. This journey demands countless hours, months of dedication, and enduring stress and sweat. Crucial to this endeavor is not only the personal commitment but also the collective effort and support from those around us.

At the Western, this support was spearheaded by Prof Tran, with contributions from various consultants at different stages. In 2023, this collaborative effort took the form of "Beers and Tears," a misnomer as tears were absent from public view, and beer consumption remained modest until the final evening. This weekly gathering served as our platform for interview practice and preparation, featuring the participation of Western Registrars Ben McElwee, Lily Salehi, Phoebe Walker, Min Jia Tang and Western alumnus Andy

Ho. Under Prof Tran's guidance, Phoebe and I were fortunate enough to be successful in selection, marking another triumph for the West.

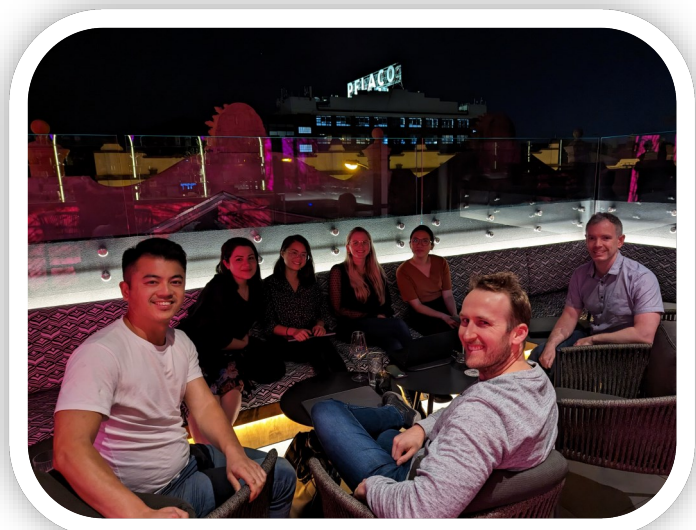
Every Thursday evening leading up to the big day, Prof Tran dedicated time away from his family to engage us in orthopedic knowledge quizzes, enhance our interview answering techniques, mentor us on leadership, and provide constructive feedback on our performances. This commitment facilitated our growth as candidates, imparted valuable insights into the intricacies of the interview process, and helped us formulate model answers and coping strategies for the big day. These sessions were further supplemented by additional practice runs with Mr Adrian Talia at the local Italian joint and at Mr Duy Thai's house with Dominos. Unfortunately regarding the latter, Ben neglected the golden rule advised by Prof when visiting an Asian household—to always remove shoes at the entrance. Rumour has it that he is

still mopping Mr Thai's entrance in penance to this day.

Informal gatherings with a few drinks helped foster open conversations, breaking down barriers to showcase and refine the natural qualities that we hoped would shine through as candidates. Training sessions occurred mostly at the Annie Lewis winebar followed by Ms Parkers bar in the lead-in months. Notably, mock interviews, involving the entire unit, were crucial stress-tests providing diverse critiques to fortify our preparation.

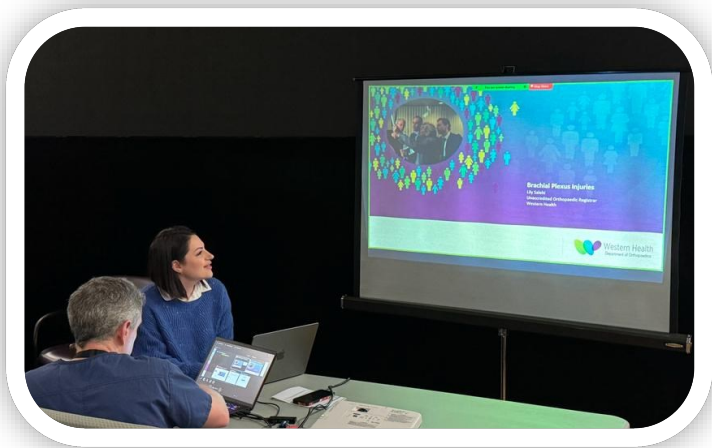
Every applicant extends heartfelt gratitude to the entire unit for the invaluable support received over the months. We acknowledge that any success achieved this year, or in the years to come, is a testament to the unwavering support, sacrifices, and time invested by everyone in our progress. ■

The registrars at the end of another gruelling interview session—looking like they could use another beer



FRIDAY MORNING RESIDENT TEACHING

Dr Lily Salehi — Unaccredited Registrar



Friday morning teaching sessions are dedicated education time for our junior medical staff. These sessions run during the Xray meeting by one of the registrars after the registrar presentations. Every Friday morning, a dedicated effort is made to transform the routine into an engaging platform for orthopaedic education. This commitment to continuous learning is not just a routine; it's a testament to the passion for cultivating a culture of excellence within the orthopaedic community.

Dedicated teaching time allows junior doctors to focus on enhancing their clinical skills. Through targeted instruction and practice, they can refine their abilities to diagnose, treat, and manage various medical conditions. The topics for the teaching sessions encompass common orthopaedic presentations and emergencies that junior doctors encounter on the

wards and participate in discussions, case studies, and hands-on activities. This dynamic approach not only enriches their understanding of orthopaedic principles but also encourages critical thinking and problem-solving skills. Having the teaching sessions with the registrars in a friendly environment provides an opportunity for the junior doctors to ask all their questions freely and offers a balanced approach to work, reducing burnout and promoting well-being as this can be a time away from the demanding and stressful clinical duties.

compartment syndrome, septic arthritis also a session to go through random X-rays and teach them how to interpret X-rays and diagnose pathologies.

Gone are the days of passive learning through textbooks and lectures. The Friday morning teaching sessions are designed to be interactive, creating an environment where interns and residents actively

Teaching time fosters critical thinking skills, enabling junior doctors to approach patient care with a more analytical and evidence-based mindset. This, in turn, contributes to improved decision-



HMOS Callum Barnden, Allan Le, Amy Luu and Kristel Harijinto under the tutelage of Registrar Cheryl Lee

MEDICAL STUDENT TEACHING

Dr Ben McElwee — Unaccredited Registrar

As the medical field advances at an unprecedented pace, the importance of seasoned professionals passing on their knowledge to the next generation becomes increasingly vital. One of the hallmarks of being a doctor is the dedication to this tutelage in order to foster excellence in the ongoing care of our patients. 2023 allowed for further return to normality for our medical students after the catastrophic disruptions due to the Covid-19 pandemic.

This year, Ben McElwee, an Orthopaedic registrar and keen educator, took a proactive approach to teaching by conducting regular tutorials for junior doctors and medical students alike. Through these sessions, he not only shared his extensive knowledge but also fostered an environment of collaboration and curiosity. His

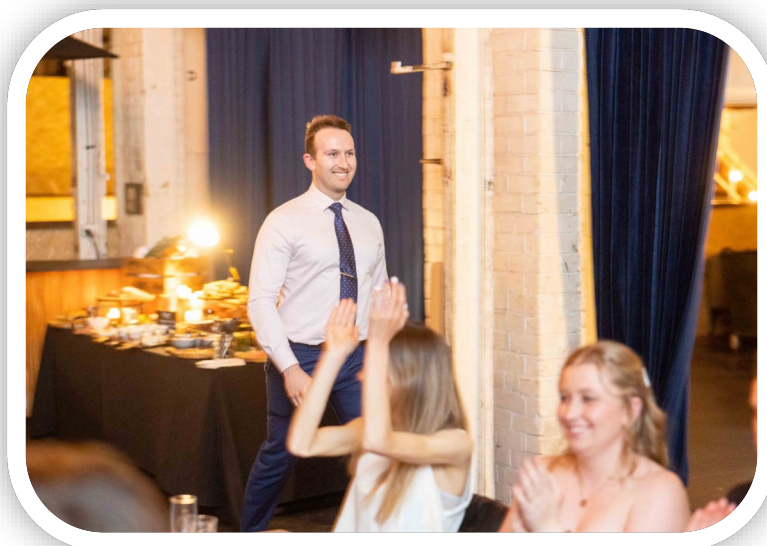
commitment to ensuring that the next generation of medical professionals is well-prepared and equipped with both theoretical and practical skills has been unwavering.

In addition, the registrars, consultants, and technicians of the Western Health Orthopaedic Department took part in regular formal and informal teaching sessions including plastering, describing X-rays, clinical assessment of the trauma patient, and Orthopaedic emergencies. It is important to note that these sessions were held anywhere and at any time as there is always opportunity for teaching during busy days as an Orthopaedic clinician.

In November, Ben was awarded “The Jenny Schwarz Teaching Award”, an award for the best

registrar or consultant clinical tutor as voted by the final year medical students at Melbourne University. This award was presented at the University Valedictory dinner which celebrated the great achievements of the graduating class of 2023 and was humbly accepted by Ben. The award is testament to Ben's ability to connect with students, making the learning process both engaging and enjoyable.

As the Western Health Orthopaedic Department continues to thrive, Ben hopes to continue driving a regular teaching schedule which embraces medical students within the Orthopaedic unit and aids in inspiring the next generation of Orthopaedic surgeons. ■



Ben McElwee being presented with the Jenny Schwarz Teaching award

MEDICAL STUDENT REPORT

Saad Alkassab—MD4 / Clinical Assistant



My name is Saad Alkassab, I am a final year (graduating) student from the Melbourne medical school.

My first experience with the Western's orthopaedic unit was in fact the first day in my career placed on the wards, about 3 years ago. It was a love at first sight. Frankie was the inten covering the unit then and we were completely smashed with the workload. Later I realised that is in fact a normal day on Orthopaedics ward and hardworking Frankie is able to manage while simultaneously teaching and mentoring.

Most of my time spent in the unit however has been over the past year, whether being on placement, coming in as a clinical assistant on almost every weekend or "accidentally" losing my colorectal or

medical team during ward rounds whilst with them on placement and finding my way to theatre to assist Dr Miller in his Arthroplasties list. Who also later kindly invited me to scrub in for his plate and nail combo, which I am very appreciative of.

The registrars, HMOs and Interns have always engaged me and answered my questions. Whether that be during formal teaching sessions with Lily, Toan and Ben, during theatre time with Mike, or on ward rounds with Nick and Min.

Perhaps the highlight of my time on the unit is that spent on Tuesday's clinics. I tried my best to attend every clinic during the whole year, even when I had exams the following day, because of how valuable the learning was when interacting with both patients and doctors. Also, because of how busy the clinics often was. I was encouraged to see patients in wound and fracture clinics, write notes and present them to registrars and trauma consultants, who always gave constructive feedback and supported me. At times, creating a competitive atmosphere betting against my management plan as what Toan and Lily would sometimes do when I presented to them.

There are so many memorable moments for me from diagnosing a posterior shoulder dislocation which ED has missed, to seeing the last patient in clinic at 830pm with Mr Alghamdi on his first clinic day. Welcome to Tuesday clinic Mr Alghamdi. I wanted to list the names of everyone who contributed to my learning, but then I will just end up writing everyone's name, so I will suffice with mentioning the most senior doctor who spent the most time listening to my whacky presentations in the first half of the year and still gave me a perfect reference, Mr Adrian Talia.

Finally, I would like to thank the JMOs, Daniel, Frankie, Shyamolie, Anthony and of course the lead plaster tech John who did a tremendous job in assisting me running an orthopaedics' focused sessions in plastering and fracture recognition which was attended by many medical students. Who mentioned appreciation for such learning opportunity that is often not included in medical school curricula and is much needed.

I look forward in great enthusiasm and excitement to returning next year as an Orthopaedics intern and hopefully continuing to come into as many Tuesday clinics as possible. ■

ARTHROSCOPIC SIMULATOR

Dr Nick Marson— Accredited Orthopaedic Registrar

Registrars had access to an arthroscopic simulator for 5 weeks prior to AORA. The simulator provided realistic instruments and highly-realistic graphics, ensuring seamless skill transfer from the simulator to the operating room. Anatomically correct models supported life-like joint movement and realistic haptic feedback, providing an unparalleled learning experience. By offering this risk-free and hands-on environment, the simulators empowered registrars to make mistakes and test boundaries without jeopardizing patient safety.

Proficiency-based courses in knee, shoulder, ankle and general arthroscopic skills helped them reach recognized benchmarks. In addition to enhancing patient care, simulation offers significant cost savings. By reducing the need for personnel, materials, equipment, and operating-room time, simulation can significantly decrease long-term costs. Simulation also accelerates the learning process. Regular access to the simulator allowed faster progress. The 24/7 availability of the simulator allowed for flexible

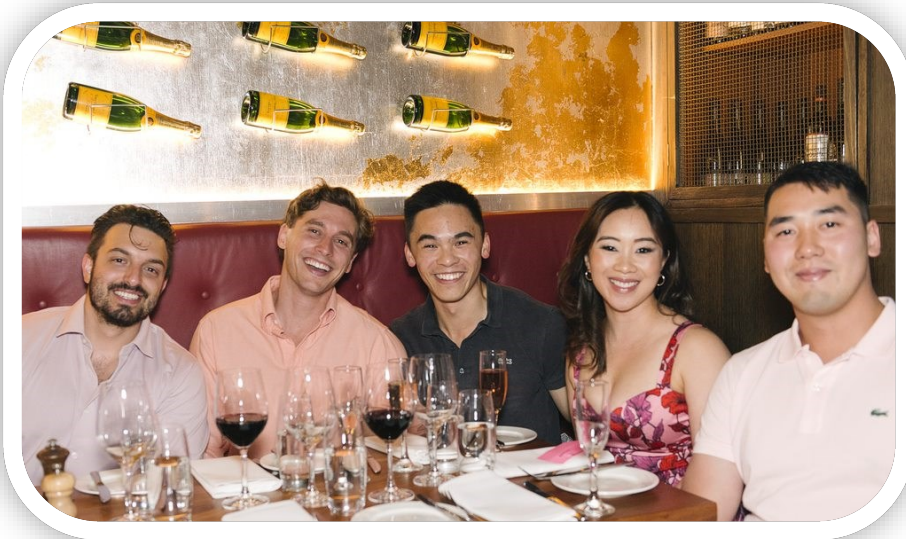
practice, while objective skill assessment with impartial feedback reports provided valuable insights and helped identify areas for improvement. Ultimately the simulator was very well received by those that put it to use and was a great educational tool. ■



Min Tang taking multiple biopsies of the simulator cartilage...while also learning how to do a knee scope

HMO REPORT

Dr Francesca Sasanelli—Resident



changes which saw the introduction of a “buddy system”. This allowed each intern to be paired with one HMO during their rotation – meaning that all interns had a “go-to” person for all their questions, concerns and support. As a whole, the new Footscray rostering changes for interns and HMOs have been very well appreciated. Interns are getting into theatre more often than previously and they are feeling better supported.

We have continued to foster our weekly resident/intern education sessions run by registrars, creating an interactive session for all of us to identify our knowledge gaps and walk away with some key messages. The teaching sessions have been extremely well run, with each registrar tailoring the questions and level of difficulty to the level of knowledge of the junior doctors present in the room. It was nice to then be able to apply what we had learnt into our daily practice, managing patients on the ward or in clinic with similar conditions/presentations.

We can't wait for what 2024 brings us and we look forward to welcoming new and returning interns and residents to the unit. ■

It is crazy to think that another year is already over and finally, for the first year in a long time, we haven't needed to log into Zoom on the daily!

2023 was another blissful year for our interns and residents. Despite the frequent changeover for intern rotations, all our junior doctors showed excellent comradery, working together as a team, across three sites. Pleasingly, many of our residents and interns whom rotated through orthopaedics this year were budding orthopaedic surgeons. We're excited to continue seeing and assisting them to progress through their junior doctor training.

2023 has been the year of updates. With the introduction of the new EMR system, we have changed many of our usual practices

including XR triaging, preadmission clinic follow up and XR meeting preparation. This has led to residents working collaboratively to update all of the ROVERs as well as upload all the necessary information to the new Western Health Orthopaedic Department website. Our resident run postoperative clinic became more efficient with the introduction of the new EMR system which created an easier workflow and access to operative reports. Residents and interns from all three different sites came together to work collaboratively and swiftly to complete post-operative clinic and their resilience and agility with the introduction of the new system was impressive.

The Footscray team welcomed some well-deserved new rostering

TRAINING IN RADIOFREQUENCY ABLATION

Prof Phong Tran

Radiofrequency ablation has gained popularity due to growing evidence supporting its effectiveness in treating early osteoarthritis. In a journal club last year, we reviewed a meta-analysis which supported for this intervention. Ishfaq Hussaini suggested that we all undergo

training in the technique through a cadaver course.

The company agreed to organize a dedicated session for our department at the University of Melbourne, with the entire unit in attendance. Subsequently, many of us have incorporated the technique

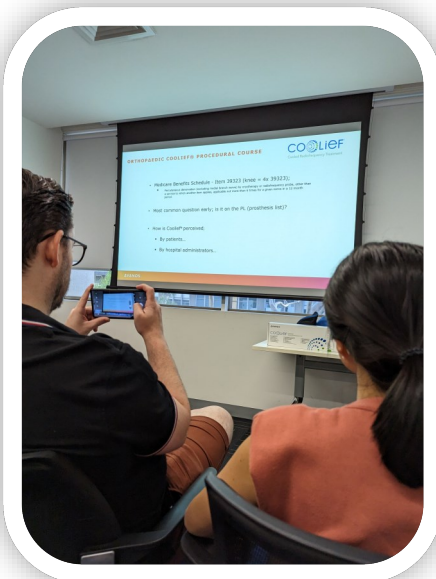
into our practices to assist patients with knee degeneration that doesn't necessitate a knee replacement. ■



Lachlan Wight and Cam Fary suiting up to watch a Radiofrequency Abalation demo



Rohan Sheehy and Duy Thai at the Radiofrequency Abalation Lab



GRAND ROUND—ERAS

We had the distinct privilege of hosting Professor Antonio Chen from Harvard University, Professor Chen's visit was marked by an enlightening presentation that delved into the intricacies of short-stay surgery. Her wealth of knowledge and insights not only captivated our audience but also inspired us to persevere in our mission to reduce postoperative stays and elevate the quality of care for our patients.

During the presentation, Professor Chen shared invaluable insights into Harvard's journey through the transition to short-stay surgery. The revelation that 50% of patients in the United States are discharged within 24 hours highlighted the success and efficiency of this approach. The emphasis on swift recovery and enhanced patient outcomes became a focal point of

our discussions, igniting a renewed commitment to implementing similar practices in our own healthcare system.

Rebecca Fewster, presented the Enhanced Recovery After Surgery (ERAS) protocol tailored for Western

Health and our population. ERAS has been a comprehensive overhaul of our patient journey – a transformative endeavor aimed at revolutionizing the way we approach surgical care from start to finish.

As we embark on this journey, our focus extends beyond the mere

reduction of postoperative stays. Are aims is to provide a better patient-centric experience. Rebecca detailed our plans to enhance pre- and post-surgery education through the incorporation of informative videos, personalized programs, and the establishment of a virtual surgery school.

This multifaceted approach aims not only to reduce postoperative stays but to optimizing and collecting objective data on the entire surgical process. ■



EDUCATION AND TRAINING

REGISTRAR PRESENTATIONS

Date	Presenter	Topic
10/02/23	Dr Sean Griffiths	Arthroplasty in Paget's disease
17/02/23	Dr Lily Salehi	Spinopelvic motion in THA
24/02/23	Dr Andy Griffith	Knee arthroscopy after TKR
03/03/23	Dr Min Jia Tang	Complications after IM fixation of extracapsular hip fractures
10/03/23	Dr Ben McElwee	Outcomes of THR/TKR in organ transplant patients
24/03/23	Dr Phoebe Walker	Principles of proximal femoral deformity correction
31/03/23	Dr Cheryl Lee	Obesity treatment in Orthopaedic surgery
05/05/23	Dr Michael Millar	Management options in ACL injuries
19/05/23	Dr Lachlan Wight	Unpacking the CPAK classification
02/06/23	Dr Sean Griffiths	Principles of fasciotomy closure after compartment syndrome release
09/06/23	Dr Peter Wong	Idiopathic toe walking
16/06/23	Dr Min Jia Tang	Heterotrophic Ossification in Hip Replacements
23/06/23	Dr Toan Phu	Warrnambool Winter Welcome
30/06/23	Dr Andy Griffith	Periprosthetic humeral fractures post TSR
07/07/23	Dr Ben McElwee	Assessment & intervention for vascular injuries associated with fractures
14/07/23	Dr Lily Salehi	Multiligamentous knee injuries
11/08/23	Dr Phoebe Walker	Talus Fractures: Current Management
25/08/23	Dr Toan Phu	Anterior shoulder instability bone loss
01/09/23	Dr Tim Maher	Endoscopic vs open carpal tunnel release
08/09/23	Dr Min Jia Tang	Management of Intra-capsular Neck of Femur fractures
15/09/23	Dr Sean Griffiths	Management of Bone Defects
22/09/23	Dr Ben McElwee	Shoulder Arthrodesis
27/10/23	Dr Lily Salehi	Brachial Plexus Injuries
17/11/23	Dr Micheal Millar	Elbow Fractures
24/11/23	Dr Nick Marson	Periprosthetic Joint Infection
01/12/23	Dr Toan Phu	Unicompartmental Knee Replacement
08/12/23	Dr Phoebe Walker	Finger Fractures
15/12/23	Dr Cheryl Lee	Charcot Foot Arthropathy

EDUCATION AND TRAINING

JOURNAL CLUB

30 th January 2023	Dr Raymond Crowe	
<p>Clinical effectiveness and safety of aspirin and other anticoagulants for venous thromboembolism prophylaxis after major orthopedic surgery: a systematic review and meta-analysis of randomized clinical trials</p> <p>Singjie LC, Halomoan R, Saleh I, Sumargono E, Kholinne E. Clinical effectiveness and safety of aspirin and other anticoagulants for venous thromboembolism prophylaxis after major orthopedic surgery: a systematic review and meta-analysis of randomized clinical trials. EFORT Open Rev. 2022 Dec 21;7(12):792-799. doi: 10.1530/EOR-22-0053. PMID: 36541528; PMCID: PMC9880907.</p>	Andy Ho	
<p>Matrix-Induced Autologous Chondrocyte Implantation versus Multipotent Stem Cells for the Treatment of Large Patellofemoral Chondral Lesions: A Nonrandomized Prospective Trial</p> <p>Gobbi A, Chaurasia S, Karnatzikos G, Nakamura N. Matrix-Induced Autologous Chondrocyte Implantation versus Multipotent Stem Cells for the Treatment of Large Patellofemoral Chondral Lesions: A Nonrandomized Prospective Trial. Cartilage. 2015 Apr;6(2):82-97. doi: 10.1177/1947603514563597. PMID: 26069711; PMCID: PMC4462249.</p> <p>BMAC Combined with Hyaluronic-Based Scaffold (Hyalofast) for full thickness cartilage defect - Long term outcome</p>	Phoebe Walker	
<p>Metal ion release barrier function and biotribological evaluation of a zirconium nitride multilayer coated knee implant under highly demanding activities wear simulation</p> <p>Puente Reyna AL, Fritz B, Schwiesau J, Schilling C, Summer B, Thomas P, Grupp TM. Metal ion release barrier function and biotribological evaluation of a zirconium nitride multilayer coated knee implant under highly demanding activities wear simulation. J Biomech. 2018 Oct 5;79:88-96. doi: 10.1016/j.jbiomech.2018.07.043. Epub 2018 Aug 4. PMID: 30111498.</p> <p>What role does metal allergy sensitization play in total knee arthroplasty revision?</p> <p>Lionberger DR, Samorajski J, Wilson CD, Rivera A. What role does metal allergy sensitization play in total knee arthroplasty revision? J Exp Orthop. 2018 Aug 14;5(1):30. doi: 10.1186/s40634-018-0146-4. PMID: 30109436; PMCID: PMC6091498.</p>	Karen Bourns	



EDUCATION AND TRAINING

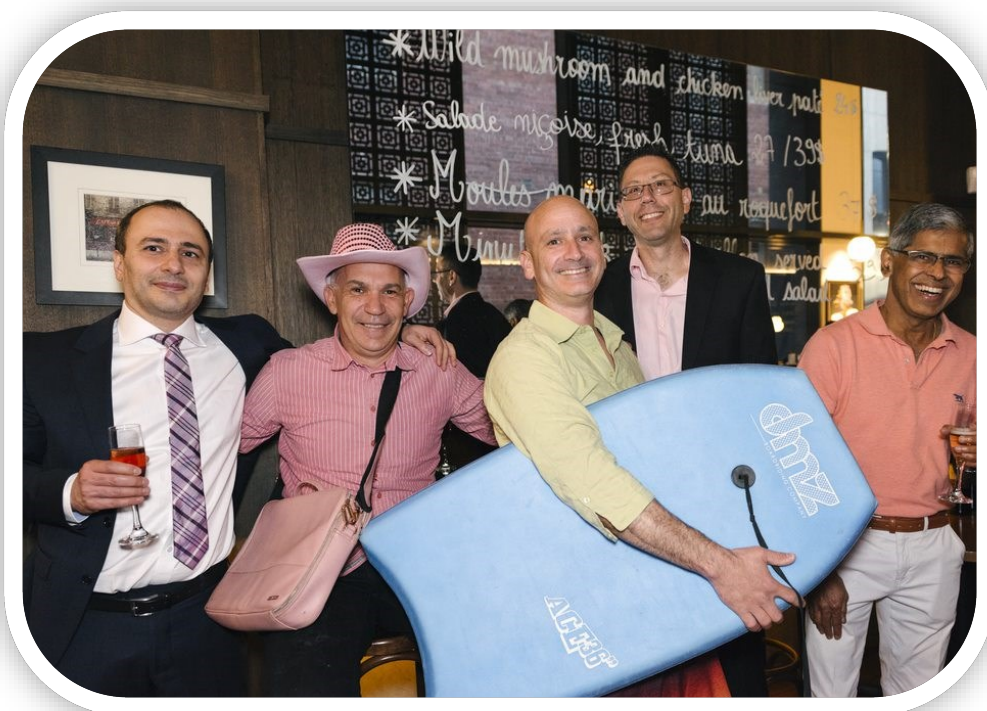
JOURNAL CLUB

20 th March	Dr Adrian Talia	
<p>No Benefit of Adductor Canal Block Compared with Anterior Local Infiltration Analgesia in Primary Total Knee Arthroplasty</p> <p>Pic C, Macabeo C, Waissi E, Lasselin P, Raffin M, Pradat P, Lalande L, Lustig S, Aubrun F, Dziadzko M. No Benefit of Adductor Canal Block Compared with Anterior Local Infiltration Analgesia in Primary Total Knee Arthroplasty: A Single-Blinded Randomized Controlled Clinical Trial. J Bone Joint Surg Am. 2023 Feb 1;105(3):231-238. doi: 10.2106/JBJS.22.00745. Epub 2022 Nov 18. PMID: 36723467.</p>	Andrew Griffith	
<p>Functional Outcomes of Dorsal Bridge Plating for Lisfranc Injuries With Routine Implant Retention: A Major Trauma Center Experience</p> <p>Onochie E, Bua N, Mmerem K, Heidari N, Vris A, Malagelada F, Parker L, Jeyaseelan L. Functional Outcomes of Dorsal Bridge Plating for Lisfranc Injuries With Routine Implant Retention: A Major Trauma Center Experience. J Orthop Trauma. 2023 Jan 1;37(1):e22-e27. doi: 10.1097/BOT.0000000000002469. PMID: 35947752.</p>	Sean Griffiths	
<p>Pre-Visit Digital Messaging Improves Patient-Reported Outcome Measure Participation Prior to the Orthopaedic Ambulatory Visit</p> <p>Yedulla NR, Hester JD, Patel MM, Cross AG, Peterson EL, Makhni EC. Pre-Visit Digital Messaging Improves Patient-Reported Outcome Measure Participation Prior to the Orthopaedic Ambulatory Visit: Results from a Double-Blinded, Prospective, Randomized Controlled Trial. J Bone Joint Surg Am. 2023 Jan 4;105(1):20-26. doi: 10.2106/JBJS.21.00506. Epub 2022 Dec 2. PMID: 36598473.</p>	Lily Salehi	
17 th April 2023	Mr Brett Moreira	
<p>Long-term recurrence rate in anterior shoulder instability after Bankart repair based on the on- and off-track concept</p> <p>Schwihla I, Wieser K, Grubhofer F, Zimmermann SM. Long-term recurrence rate in anterior shoulder instability after Bankart repair based on the on- and off-track concept. J Shoulder Elbow Surg. 2023 Feb;32(2):269-275. doi: 10.1016/j.jse.2022.07.025. Epub 2022 Sep 13. PMID: 36113705.</p>	Ben McElwee	
<p>Evidence-based algorithm to treat patients with proximal humerus fractures - a prospective study with early clinical and overall performance results</p> <p>Spross C, Meester J, Mazzucchelli RA, Puskás GJ, Zdravkovic V, Jost B. Evidence-based algorithm to treat patients with proximal humerus fractures-a prospective study with early clinical and overall performance results. J Shoulder Elbow Surg. 2019 Jun;28(6):1022-1032. doi: 10.1016/j.jse.2019.02.015. Epub 2019 Apr 16. PMID: 31003888.</p>	Lachlan Wight	
<p>Internal Joint Stabilizer: A Safe Treatment for Traumatic Elbow Instability</p> <p>Fene ES, Grewal IS, Eakin JL, Sanders DT, Starr AJ. Internal Joint Stabilizer: A Safe Treatment for Traumatic Elbow Instability. J Orthop Trauma. 2022 Sep 1;36(9):458-464. doi: 10.1097/BOT.0000000000002370. PMID: 35302965.</p>	Cheryl Lee	

EDUCATION AND TRAINING

JOURNAL CLUB

15 th May 2023	Dr Saeed Asadollahi	
<p>Success of Debridement, Antibiotics, and Implant Retention in Prosthetic Joint Infection Following Primary Total Knee Arthroplasty: Results from a Prospective Multicenter Study of 189 Cases</p> <p>Rahardja R, Zhu M, Davis JS, Manning L, Metcalf S, Young SW. Success of Debridement, Antibiotics, and Implant Retention in Prosthetic Joint Infection Following Primary Total Knee Arthroplasty: Results From a Prospective Multicenter Study of 189 Cases. J Arthroplasty. 2023 Jul;38(7 Suppl 2):S399-S404. doi: 10.1016/j.arth.2023.04.024. Epub 2023 Apr 19. PMID: 37084921.</p>	<p>Andrew Griffith</p>	
<p>Malseating of Modular Dual Mobility Liners: High Prevalence in Revision Total Hip Arthroplasty</p> <p>Bengoa FJ, Howard LC, Neufeld ME, Garbuz DS. Malseating of Modular Dual Mobility Liners: High Prevalence in Revision Total Hip Arthroplasty. J Arthroplasty. 2023 Jul;38(7S):S211-S216. doi: 10.1016/j.arth.2023.03.094. Epub 2023 Apr 5. PMID: 37028771.</p>	<p>Phoebe Walker</p>	
<p>Clinical and Radiological Outcome of Vancouver B2 Fracture Treated With Open Reduction and Internal Fixation. A Multicenter Cohort Analysis</p> <p>Biberthaler P, Pflüger P, Wurm M, Hanschen M, Kirchoff C, Aderinto J, Whitwell G, Giannoudis PV, Kanakaris N. Clinical and Radiological Outcome of Vancouver B2 Fracture Treated With Open Reduction and Internal Fixation. A Multicenter Cohort Analysis. J Orthop Trauma. 2022 Aug 1;36(8):e306-e311. doi: 10.1097/BOT.0000000000002354. Epub 2022 Feb 11. PMID: 35166267; PMCID: PMC9249072.</p>		



EDUCATION AND TRAINING

JOURNAL CLUB

19 th June 2023	Prof Phong Tran	
VU's musculoskeletal research capability/capacity and facilities WH/VU Alliance, Research Collaboration and NFH update Musculoskeletal overview and capability, including wait list project. Q&A		Victoria University Staff
Consensus statement for perioperative care in total hip replacement and total knee replacement surgery: Enhanced Recovery After Surgery (ERAS®) Society recommendations Wainwright TW, Gill M, McDonald DA, Middleton RG, Reed M, Sahota O, Yates P, Ljungqvist O. Consensus statement for perioperative care in total hip replacement and total knee replacement surgery: Enhanced Recovery After Surgery (ERAS®) Society recommendations. Acta Orthop. 2020 Feb;91(1):3-19. doi: 10.1080/17453674.2019.1683790. Epub 2019 Oct 30. Update in: Acta Orthop. 2020 Feb 14;;1. PMID: 31663402; PMCID: PMC7006728.		Lily Salehi Min Tang
Western Health ERAS protocol		Rebecca Fewster
24 th July 2023	Dr David Shepherd	
Minimum 5-Year Follow-up Results: CROSSBAT (Combined Randomised and Observational Study of Surgery for Type B Ankle Fracture Treatment) O'Keefe R, Naylor JM, Symes MJ, Harris IA, Mittal R. Minimum 5-Year Follow-up Results: Foot Ankle Int. 2022 Dec;43(12):1517-1524. doi: 10.1177/10711007221128562. Epub 2022 Nov 14. PMID: 36373545.		Andrew Griffith
Assessment of Posterior and Middle Facet Subluxation of the Subtalar Joint in Progressive Flatfoot Deformity de Cesar Netto C, Silva T, Li S, Mansur NS, Auch E, Dibbern K, Femino JE, Baumfeld D. Foot Ankle Int. 2020 Oct;41(10):1190-1197. doi: 10.1177/1071100720936603. Epub 2020 Jun 26. PMID: 32590925. & Classification and Nomenclature: Progressive Collapsing Foot Deformity Myerson MS, Thordarson DB, Johnson JE, Hintermann B, Sangeorzan BJ, Deland JT, Schon LC, Ellis SJ, de Cesar Netto C. 2020 Oct;41(10):1271-1276. doi: 10.1177/1071100720950722. Epub 2020 Aug 28. PMID: 32856474.		Min Tang
Outcomes of Salvage Procedures for Failed Total Ankle Arthroplasty Pfahl K, Röser A, Eder J, Gottschalk O, Hörterer H, Mehlhorn A, Walther M. Foot Ankle Int. 2023 Apr;44(4):262-269. doi: 10.1177/10711007231156426. Epub 2023 Mar 6. PMID: 36879477.		Francesca Sasanelli

EDUCATION AND TRAINING

JOURNAL CLUB

14 th August 2023	Dr Simon Talbot	
<p>Healing of acute anterior cruciate ligament rupture on MRI and outcomes following non-surgical management with the Cross Bracing Protocol</p> <p>Filbay SR, Dowsett M, Chaker Jomaa M, Rooney J, Sabharwal R, Lucas P, Van Den Heever A, Kazaglis J, Merlino J, Moran M, Allwright M, Kuah DEK, Durie R, Roger G, Cross M, Cross T. Br J Sports Med. 2023 Dec;57(23):1490-1497. doi:10.1136/bjsports-2023-106931. Epub 2023 Jun 14. PMID: 37316199; PMCID: PMC10715498.</p>	Lily Salehi	
<p>Bridge-Enhanced Anterior Cruciate Ligament Repair Is Not Inferior to Autograft Anterior Cruciate Ligament Reconstruction at 2 Years Results of a Prospective Randomized Clinical Trial</p> <p>Murray MM, Fleming BC, Badger GJ; BEAR Trial Team; Freiburger C, Henderson R, Barnett S, Kiapour A, Ecklund K, Proffen B, Sant N, Kramer DE, Micheli LJ, Yen YM. Am J Sports Med. 2020 May;48(6):1305-1315. doi: 10.1177/0363546520913532. Epub 2020 Apr 16. PMID: 32298131; PMCID: PMC7227128.</p>	Timothy Maher	
<p>Generalised joint hypermobility leads to increased odds of sustaining a second ACL injury within 12 months of return to sport after ACL reconstruction</p> <p>Zsidai B, Piussi R, Thomeé R, Sundemo D, Musahl V, Samuelsson K, Hamrin Senorski E. Br J Sports Med. 2023 Aug;57(15):972-978. doi: 10.1136/bjsports-2022-106183. Epub 2023 May 16. PMID: 37192830; PMCID: PMC10423474.</p>	Phoebe Walker	



EDUCATION AND TRAINING

JOURNAL CLUB

16 th October 2023	Dr Daniel Sydenham	
<p>Robotics Versus Navigation Versus Conventional Total Hip Arthroplasty: Does the Use of Technology Yield Superior Outcomes?</p> <p>Singh V, Realyvasquez J, Simcox T, Rozell JC, Schwarzkopf R, Davidovitch RI. J Arthroplasty. 2021 Aug;36(8):2801-2807. doi: 10.1016/j.arth.2021.02.074. Epub 2021 Mar 5. PMID: 33773864.</p>	Min Tang	
<p>Robot assisted total knee arthroplasty is associated with a learning curve for surgical time but not for component alignment, limb alignment and gap balancing</p> <p>Vermue H, Lambrechts J, Tampere T, Arnout N, Auvinet E, Victor J. Bone Joint J. 2020 Apr;102-B(4):407-413. doi: 10.1302/0301-620X.102B4.BJJ-2019-1210.R1. PMID: 32228069.</p>	Ben McElwee	
<p>Patient Satisfaction Outcomes after Robotic Arm-Assisted Total Knee Arthroplasty: A Short-Term Evaluation</p> <p>Marchand RC, Sodhi N, Khlopas A, Sultan AA, Harwin SF, Malkani AL, Mont MA. J Knee Surg. 2017 Nov;30(9):849-853. doi: 10.1055/s-0037-1607450. Epub 2017 Oct 13. PMID: 29029352.</p>	Sean Griffiths	

20 th November 2023	Dr Raymond Crowe	
<p>Clinical and Patient-Reported Outcomes of Medial Stabilized Versus Non-Medial Stabilized Prostheses in Total Knee Arthroplasty: A Systematic Review and Meta-Analysis</p> <p>Tso R, Smith J, Doma K, Grant A, McEwen P. J Arthroplasty. 2021 Feb;36(2):767-776.e2. doi: 10.1016/j.arth.2020.07.086. Epub 2020 Aug 8. PMID: 32978025.</p>	Nick Marson	
<p>The ceiling effects of patient reported outcome measures for Total Knee Arthroplasty</p> <p>Eckhard L, Munir S, Wood D, Talbot S, Brighton R, Walter B, Baré J. Orthop Traumatol Surg Res. 2021 May;107(3):102758. doi: 10.1016/j.otsr.2020.102758. Epub 2020 Dec 11. PMID: 33316442.</p>	Phoebe Walker	
<p>Birmingham Hip Resurfacing at 20 years</p> <p>Dhawan R, Young DA, Van Eemeren A, Shimmin A. Bone Joint J. 2023 Sep 1;105-B(9):946-952. doi: 10.1302/0301-620X.105B9.BJJ-2022-0713.R2. PMID: 37652450.</p>	Cheryl Lee	

RESEARCH REPORT

Dr Libby Spiers

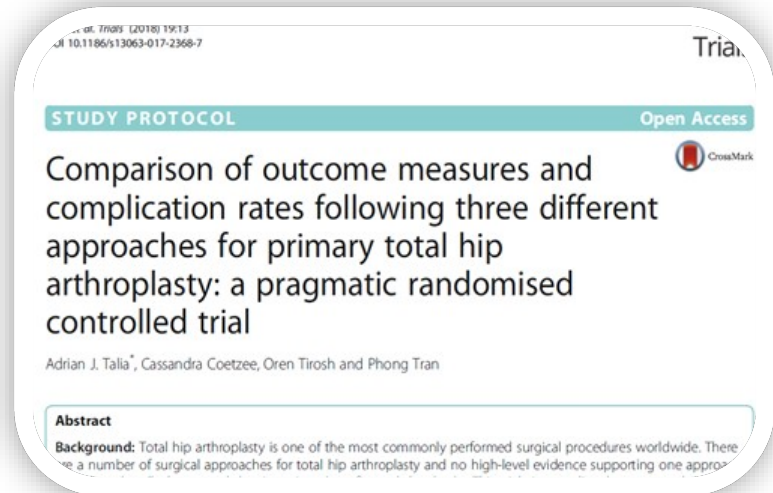
The Orthopaedic Research team has enjoyed another very busy and productive year, this time minus the COVID lockdowns! It has been great to be back to full speed in Clinic D to collect PROMs and recruit research participants as well as continue the great work that has been done remotely over the past few years.

Highlights of 2023 have included forward momentum of a new project to optimise outpatient services based on routine PROMs and JMO telehealth; receiving a \$10,000 Bank Vic grant for an upcoming RCT involving patients with limited English proficiency; nearing completion of enrolment in the THA Approach RCT; hitting the 50% recruited mark for the ACL-R RCT; and commencing the new paediatric VicHip project with MCRI.

THA approach RCT

Background

This RCT was initiated by Adrian Talia and Prof Tran in 2017 and aims to compare **outcomes of three THA surgical approaches** (anterior, posterior and Hardinge) **at 2 years** using the Oxford Hip Score, VAS pain and quality of life (EQ5D-5L). Patients who consent to take part are randomised to approach, rather than surgeon. Surgeons only use the approach/es that they would normally use.



Recruitment – almost there!

Research Assistant, Natali Coric, has worked incredibly hard on recruitment during 2023, with a total of **279** participants randomised and just **5** more to enroll to finish recruitment. She has been chasing a moving target given that the sample size was increased yet again mid-year, now sitting at 285. The long surgical delays exacerbated by COVID have led to a significant number of patients (26 or almost 10%) seeking private care. There has also been a 5% mortality rate (including patients awaiting surgery), which is higher than the 2% anticipated rate built into the research plan. This large and unanticipated number of withdrawals from the study meant that we were at risk of not having enough patients reaching the 2-year primary outcome to answer the research question. This has resulted in us increasing the recruitment

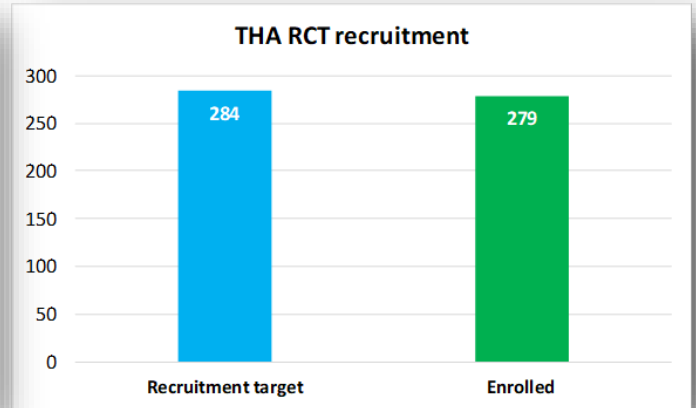
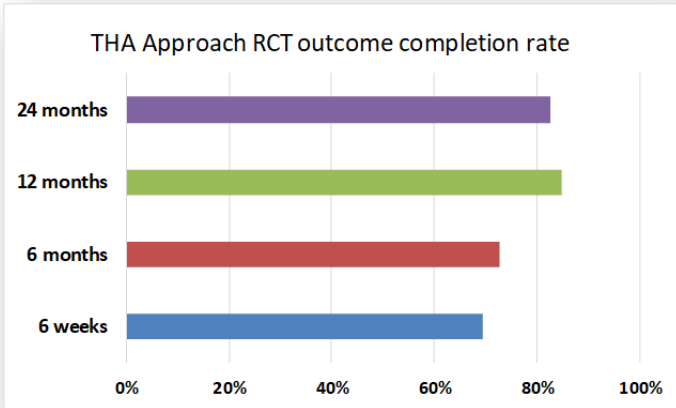
target twice, once in 2022 and then again in 2023. Thankfully, we now have the end of recruitment in sight.

35 patients are still awaiting surgery – we hope to see all trial participant surgery completed by the end of 2024. Natali is carefully following up all participants at 6 weeks and 6, 12 and 24 months. Patients can complete their questionnaires via the online REDCap platform, over the phone or via post.

Retention / follow-up – going well

94 patients have completed outcome measures at the primary time-point of 2 years. This is **82%** of those who have reached 2 years. This retention rate will allow us to reach the sample size needed and is an impressive effort given the high number of people seeking private surgery over the past two years.

RESEARCH



Routine collection of Patient Reported Outcome Measures

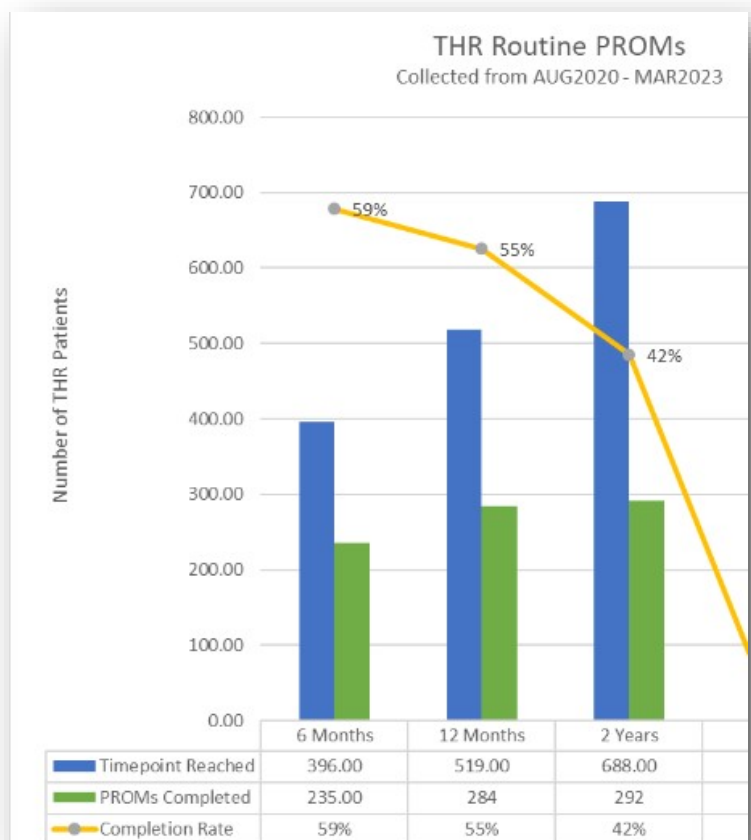
Pre-op PROMs:

VAS pain, quality of life (EQ5D) and joint-specific scores are collected pre-operatively in most patients undergoing major elective surgery. This collection occurs in Clinic D, where patients receive a REDCap link via SMS and can sit and complete their PROMs on their mobile phone in clinic or do so at home. Paper questionnaires are still available for those who prefer them.

Post-op PROMs:

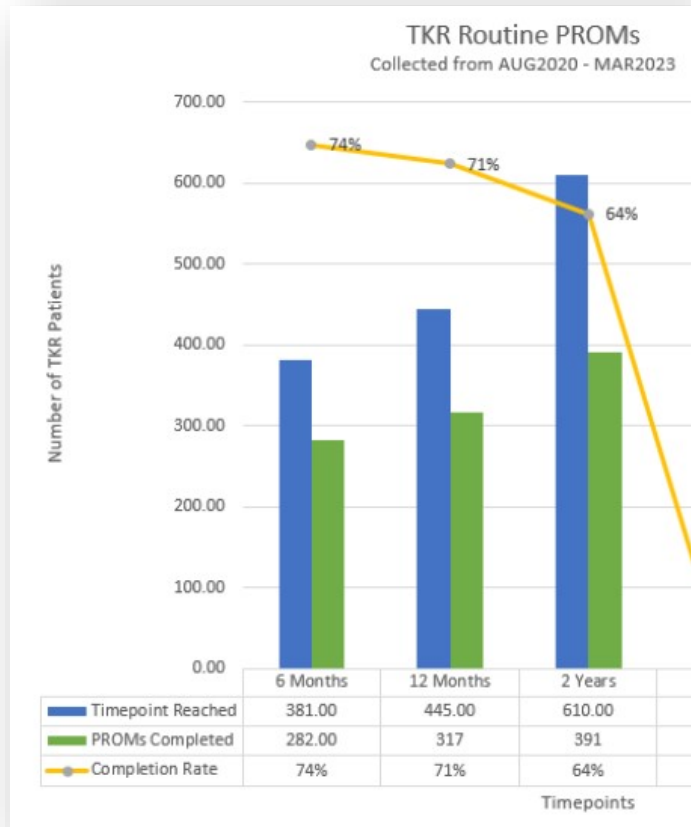
Routine collection is occurring for those patients undergoing **THA, TKA and ALC-R**. Patients are contacted at 6 months then at 1, 2, 5 and 10 years after surgery. The REDCap online platform is used for this collection, with links sent out to patients via SMS and/or email. Those patients providing an email address will receive the questionnaires via an automated email invitation at the various post-op time-points. Patients can also complete these measures on paper or over the phone with Eugenie, Minh or Natali if they prefer.

Oxford Hip completion rates since routine post-op collection commenced in 2020

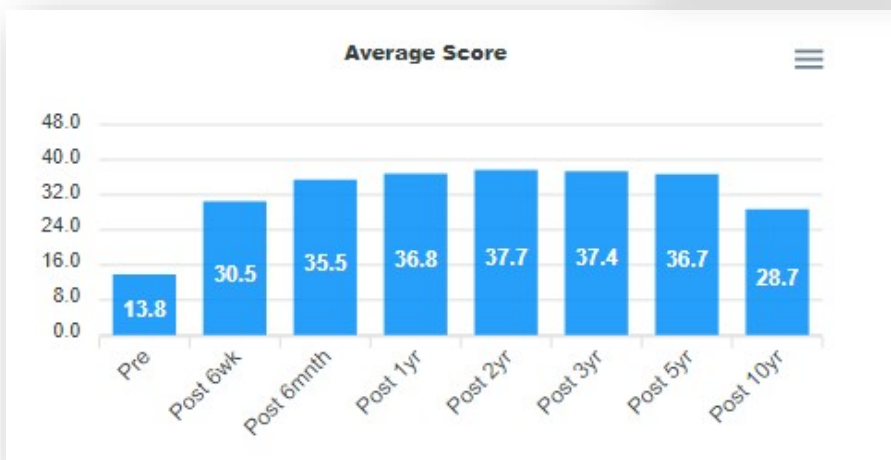


RESEARCH

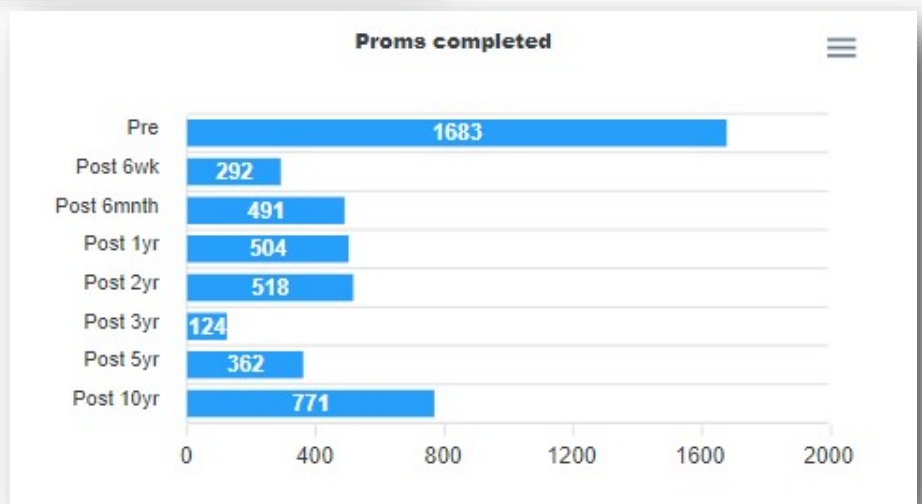
Oxford Knee completion rates since routine post-op collection commenced in 2020



Oxford Hip Score – scores following THA



Oxford Hip Score completion at WH in patients undergoing THA – 2012 to 2023



RESEARCH

Telehealth and outpatient reviews – integration with routine hip and knee PROMs collection

The research team is working with the medical staff and Adult Specialist Clinic (ASC) on an exciting innovation that aims to optimise orthopaedic outpatient care. This initiative aims to do this by freeing up appointments that were booked for patients who no longer need reviews and providing appointments for post-surgical patients who do require them. This is being made possible by the provision of telehealth follow up with our patients who have undergone THA or TKA and have completed their post-op routine PROMs.

Steps involved:

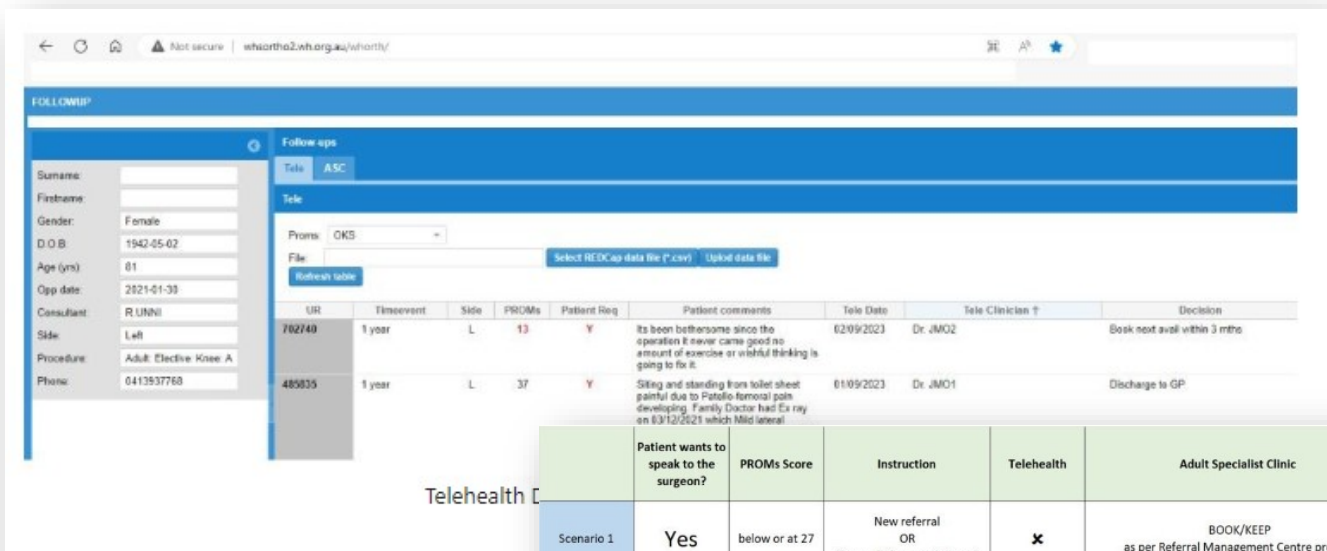
1. WH patients complete post-op questionnaire (including Oxford Hip Score or Oxford Knee Score) and tell us if they have issues related to the operated joint.
2. Patient's responses, as well as their OHS/OKS score determine if they will get telehealth from a registrar and/or a face-to-face appointment with the consultant (see below matrix).
3. Depending on the outcome of telehealth, the JMOs submit new EMR internal referrals to ASC for bookings, and can also authorise discharge.
4. SC will then action appointment booking and discharge requests as per usual Referral Management Centre process.

5. ASC will notify patients regarding new appointment and discharge via SMS letter.

A new dashboard has been created in the Sunray orthopaedic dashboard, called "Followup".

The dashboard includes patient demographics, date of surgery, consultant, mobile number, and date that PROMs were completed.

Registrar will call the patient who meets the above criteria and ultimately decide if the patient will keep their current appointment, if the patient can be discharged to GP, or (if patient has already been discharged) patient will have another appointment made within 3 months.



Telehealth C

	Patient wants to speak to the surgeon?	PROMs Score	Instruction	Telehealth	Adult Specialist Clinic
Scenario 1	Yes	below or at 27	New referral OR Keep existing appointment	✗	BOOK/KEEP as per Referral Management Centre process
Scenario 2	Yes	above 27	Depends	✓	BOOK/DISCHARGE as per Referral Management Centre process
Scenario 3	No	below or at 27	Depends	✓	BOOK/DISCHARGE as per Referral Management Centre process
Scenario 4	No	above 27	Cancel existing appointment AND Close referral AND Discharge	✗	DISCHARGE as per Referral Management Centre process

Routine Follow-up Triage Matrix

ACL-RCT - Suture-tape augmentation of anterior cruciate ligament reconstruction: a prospective, randomised controlled trial (STACLAR)

Background

This RCT compares the effect of **standard ACL reconstruction surgery to ACL reconstruction surgery with additional suture tape augmentation** on PROMs and knee laxity at the primary time-point of 2 years post-op.

Research team

Prof Tran is the Principal Investigator, while Mr Lachlan Batty and Mr Scott Tulloch are Associate Investigators and are the operating surgeons involved in the trial. The team was successful in securing \$56,000 of funding from Arthrex. This has been directed towards the \$22K GNRB device used to assess knee laxity as well as research assistant staffing. In addition, Dr Lachie Huntington was successful in his application for \$5750 in grant funding from the Victorian Orthopaedic Foundation in 2022.

Research Assistant Minh Ngo co-ordinates the trial and her attention to detail and meticulous follow up has seen great retention rates for the study so far.

Physiotherapists Darren Fraser and Lydia Chew are carrying out the primary outcome measure of the

GNRB assessments.

Study aims

This study will compare residual anterior knee laxity after primary hamstring autograft ACLR with or without suture

Protocol

The protocol paper was published in *Trials during the year and can be accessed at <https://doi.org/10.1186/s13063-023-07127-0>*

Inclusion criteria:

- Waitlisted for ACL-R with Mr Batty or Mr Tulloch, where use of an ipsilateral hamstring tendon autograft is planned.
- Over 18 years of age
- Able to provide informed consent and participate in the intervention and follow up.

Exclusion criteria

Patients will not be offered the trial if they have:

- had a previous ACL injury or reconstruction of the ipsilateral knee.
- open physes that would otherwise alter the surgical technique utilised.
- grade 2 or 3 medial collateral ligament (MCL)/ lateral collateral ligament (LCL) injury, associated posterior cruciate ligament (PCL)/ posterolateral corner (PLC) injury that requires surgical intervention.
- inflammatory arthritis or are

pregnant.

- an articular cartilage defect or meniscal injury (meniscal root or bucket handle) repair requiring treatment that would alter the post-operative rehabilitation protocol and timelines.
- an ACL re-rupture risk significant enough to warrant the addition of an osteotomy or deformity corrective procedure or lateral extraarticular tenodesis.

Some of these exclusions will be assessed intraoperatively, so the patient is not formally enrolled in the trial and randomised to group until during their operation.

Study aims

This study will compare residual anterior knee laxity after primary hamstring autograft ACLR with or without suture tape (ST) augmentation, as measured by the GNRB ligament arthrometer. The primary outcome measure will be the difference between operated and non-operated limbs (side-to-side difference), between groups, at 2 years.

Recruitment

The trial requires 48 participants to complete the GNRB assessment at 2 years in order to answer the research question. The sample size has a dropout rate of 30% built in, so we plan to recruit 66 participants. Recruitment got underway in May 2022. Patients are screened in outpatient clinic, with

RESEARCH

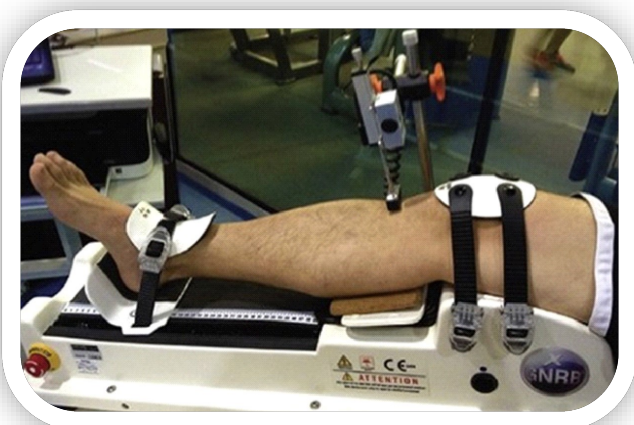
Mr Batty and Mr Tulluch determining participant eligibility then Research Assistant Minh obtaining informed consent.

So far, **34** participants have been randomised into the study, so we have just passed the half way mark. 38 consented patients having undergone surgery – four were excluded intra-operatively due to meniscal root tear, bucket handle tear and lateral tenodesis. A further 9 have consented and await surgery.

Follow up/Retention

The primary outcome for the study is knee laxity at 2 years after surgery. This measure is also collected at 3 months and 12 months post-op. PROMs are collected at 6 weeks then 3, 12 and 24 months. So far Minh has achieved great follow-up rates, with over 85% of GNRB knee laxity measurements and PROMs collected. 14 people have reached their 12-month time-point and we look forward to the first of our final/2-year follow up in May 2024.

The GNRB device, used for measuring tibial translation as an estimate of knee



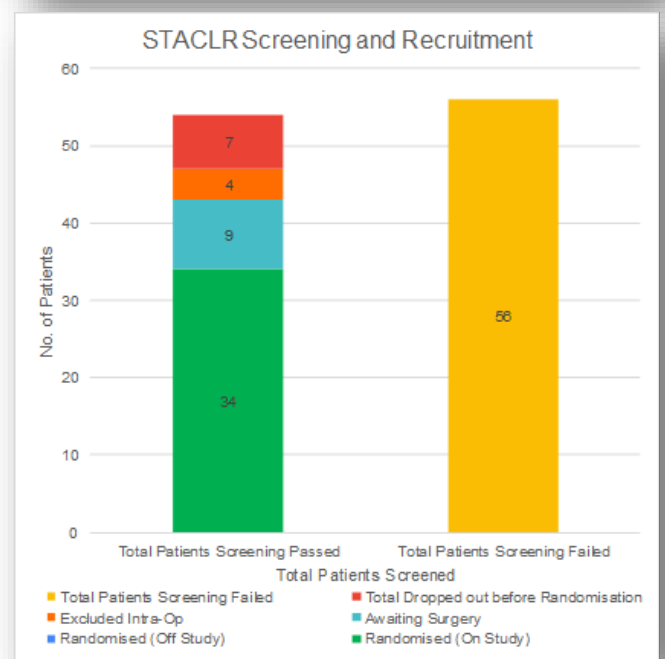
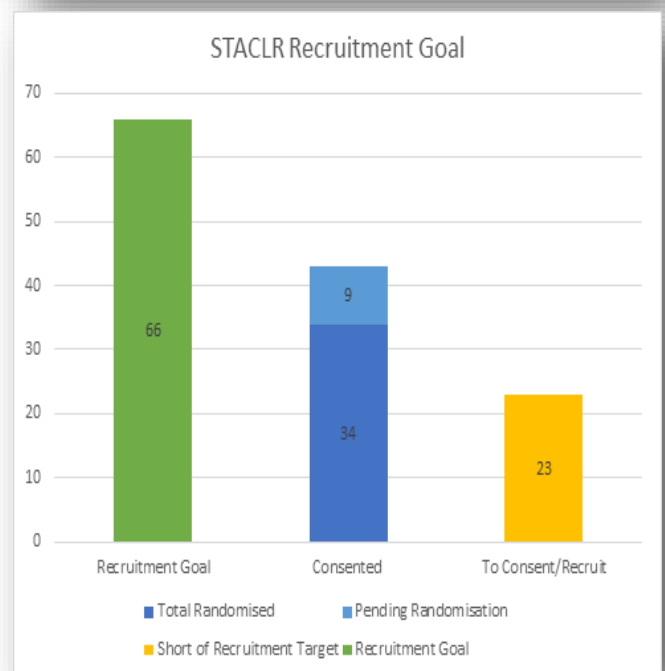
Huntington et al. *Trials* (2023) 24:224
<https://doi.org/10.1186/s13063-023-07127-0> Trials

STUDY PROTOCOL Open Access

Suture-tape augmentation of anterior cruciate ligament reconstruction: a prospective, randomised controlled trial (STACLAR)

Lachlan Huntington¹, Andrew Griffith, Libby Spiers, Rebecca Pile, Lachlan Batty, Scott Tulloch and Phong Tran

Abstract
Background Anterior cruciate ligament (ACL) reconstruction aims to restore anteroposterior and rotatory stability to the knee following ACL injury. This requires the graft to withstand the forces applied during the process of ligamentisation and the rehabilitative period. We hypothesise that the use of suture tape augmentation of single bundle ACL reconstruction (ACLRT) will reduce residual knee laxity and improve patient-reported outcomes at 2-year follow-up. We will conduct a 1:1 parallel arm single-centre randomised controlled trial comparing suture tape augmented ACLR to standard ACLR technique.
Methods The study design will be a parallel arm 1:1 allocation ratio randomised controlled trial. Sixty-six patients aged 18 and over waitlisted for primary ACLR will be randomised. Patients requiring osteotomy and extra-articular tenodesis and who have had previous contralateral ACL rupture or repair of meniscal or cartilage pathology that modifies the post-operative rehabilitation will be excluded. The primary outcome measure will be the side-to-side difference in anterior tibial translation (measured on the GNRB arthrometer) at 24 months post-surgery. GNRB arthrom-



VicHip - The Victorian Hip Dysplasia Registry

We are very excited to be involved in a new project that has just kicked off in the WH orthopaedic paediatric space. VicHip (www.vichip.org.au/) is a registry of all Victorian children who present with hip dysplasia. This project is a new initiative undertaken by the Royal Children's Hospital and MCRI with collaborating sites across Victoria. This initiative has been made possible by a large MRFF grant, with Mr Chris Harris the Principal Investigator at WH. The project aims to uncover the causes, refine the treatment, and improve the outcomes for children and young adults with hip dysplasia. The primary aims are to develop, improve and standardise both the approaches for the early diagnosis of hip dysplasia and the therapeutic regimes and models of care for hip dysplasia.

Research Assistant Minh Ngo will be working full time with the Unit to allow her to spend the allocated 2.5 days on this project.

Operative templates

Oren has worked with Prof Tran and medical staff to develop operative templates that are designed to allow more detailed data capture for orthopaedic surgical procedures. In addition, these completed templates can be printed with a



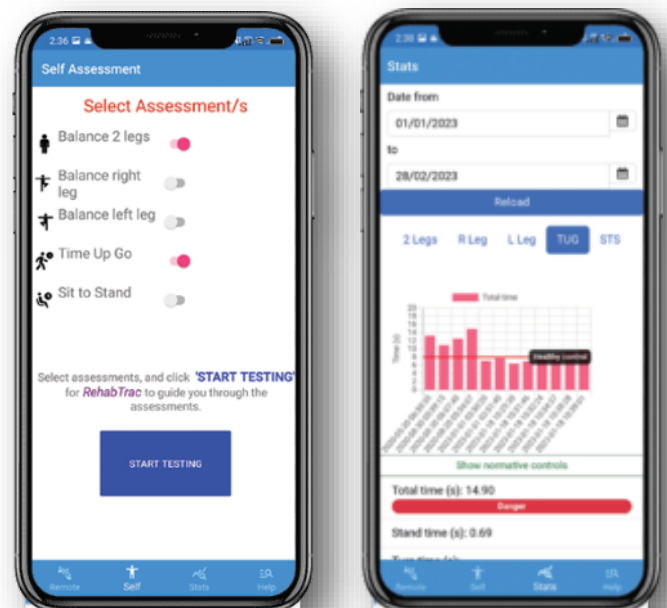
Western Health patient barcode for clinical use. They have the advantage of providing dropdown fields and tick boxes, with less free text required, making them quicker to complete and easier to search in the Ortho Databases.

This year, the operative template for THR has been further improved and streamlined, with three additional templates developed for TKR, #NOF, and general surgeries.

Oren's Teledevice in TKA/THA

The Tele-Assessment solution was designed and developed to allow assessment of patient posture and gait remotely, enabling objective remote examination and monitoring of patients' performance during their rehabilitation

journey. This year we used our tele-assessment platform to investigate the validity and reliability of the system to measure hip rotation range and its acceptability among users. Our published paper showed that the system is valid and highly reliable to measure hip range remotely. The hip replacement patients reported: "the system is easy, friendly", "it is a good solution, saves travel", "suitable for when face to face appointments cannot be implemented", and "efficient connection with therapist". Participants' feedback for further development included: "Allow the app to provide live user feedback" and "Broaden the exercise regime". This was presented at the 2021 Australian Military Medicine Association Conference. This year another paper was published using the technology



"Smartphone Technology to Remotely Measure Postural Sway during Double- and Single-Leg Squats in Adults with Femoroacetabular Impingement and Those with No Hip Pain".

THA PROMs retrospective study

During COVID, our research team worked with medical student Clinical Assistants (including Isaac Rhee) to collect missing/additional THA post-op PROMs. Isaac led the submission and publication of two papers relating to our THA PROMs data, particularly looking at OHS up to 10 years after THA surgery and examining the effect of BMI and gender on outcomes.

Waitlist project with Victoria University

This exciting collaboration between Vic Uni and the WH Orthopaedic Unit has moved to a new stage during 2023. The e-health platform developed in both English and Vietnamese in the first few years of the project is now being tested in a small group of patients in a pilot RCT run by Vic Uni PhD student, Alev.

2023 also saw completion of the 12-month data collection for the project, and presentation of some of the early findings at conferences/meetings including the WH Kendall Francis Surgical Forum, where Mary Woessner's presentation on the co-

design process used in developing the platform was awarded a prize.

Muscle strength, 3D-motion analysis and routine functional tests following three different surgical approaches of primary Total Hip Arthroplasty.

Lakshmi Varma's PhD has continued to recruit hip replacement participants for pre- and post-surgery gait testing in the Swinburne University gait lab. This project aims to compare strength, function and gait variables in patients undergoing THA with differing surgical approaches. To date, functional gait (walking, stair climb, turning) and hip strength data has been collected from 30 healthy older adults and 44 THA patients pre-surgery, of which 25 were followed with additional testing 3 and 6 months after surgery. Data collection from THA patients will be finalised at the beginning of next year, followed by data analysis and final reports.

Automatic Triage of GP Referrals through AI-Driven Software

This pilot project, a collaboration with Vic Uni, investigated the development of an AI-driven software to automatically triage patients based on their GP referrals

and radiology reports. The Vic Uni team were provided with 20 deidentified outpatient referrals and corresponding radiology reports that were tested with the AI algorithm. A software algorithm was developed to recognise characters from faxed and scanned forms, detect key words and based on this assign a category to the potential patient on the wait list. The correct/actual triage results completed by the WH orthopaedic registrars were then provided to allow assessment of accuracy. The algorithm automatically filled the triage form and a medical radiology request form to the specific imaging lab requesting the necessary X-rays / images be sent to the WH requesting doctor. The results were promising and demonstrated 16 correct labels, 2 misses and 2 queries.

Clinical and Radiographic Performance of the Cementless Quadra-P Stem in THA

This Medacta-funded research is following a subset of patients who have enrolled in the joint registry-nested parent study evaluating the Quadra P stem. The aim of the sub-study is to evaluate the radiological performance of the Quadra-P device in terms of degree of osseointegration, stem migration and risk of displacement. Patients

RESEARCH

from WH and three private surgeons' rooms have been approached to be part of the study. Libby is the Study Co-ordinator for this multisite project. 2023 saw the collection of around 60% of the 2-year x-rays, with the rest due in 2024. X-ray assessment by an independent observer will occur once data collection is complete, to investigate the degree of stem migration and the presence of radiolucencies.

Future plans

2023 is looking to be another exciting and busy year in terms of the Orthopaedic Unit's research. It is anticipated that surgery for the THA approach RCT should finish next year, and the STACLR RCT will complete enrolment and continue participant follow up. We look forward to further development of Clinic D as an area for patient education – work that was continued by Eugenie this year.

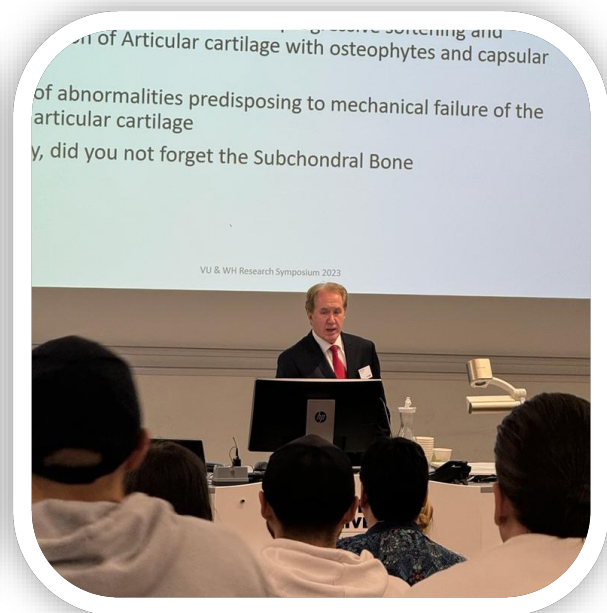
There are also several new projects looking set to get underway in 2023. These include an RCT initiated by registrar Toan Phu, which aims to determine whether informed consent for surgery in elective Orthopaedic patients with limited English proficiency can be improved using translated online patient education. This project was the recipient of a \$10,000 Bank Vic research grant during 2023. ■

THE VICTORIA UNIVERSITY SYMPOSIUM

Our collaboration with Victoria University is flourishing, exemplified by our inaugural journal club hosted at the university campus and the joint symposium held in November, drawing the participation of more than 130 individuals, focusing on the theme "EXPLORING NEW FRONTIERS IN THE CARE OF EARLY JOINT DISEASE."

Raymond Crowe, Alan Hayes and Alex Parker organised a wonderful panel of speakers. Professor Jane Fitzpatrick served as the distinguished guest speaker, delivering insightful perspectives. The university staff delivered outstanding presentations, showcasing the remarkable research initiatives undertaken at the institution. The symposium

concluded with a dynamic debate on injection therapy in the management of knee osteoarthritis by our very own Simon Talbot, Lachlan Batty and Raymond Crowe.



RESEARCH



ITEM #	SESSION PLAN	LEAD
8.30am	Coffee on arrival VU HDR student posters in foyer	
1.0	Session 1	
9am-10.15	<p>Welcome 5 mins</p> <p>Opening of symposium VU and WH research alliance, strategic directions and clinical research facilities for musculoskeletal precinct (15 mins)</p> <p>Keynote presentations Surgical and clinical innovations (15 mins) Cell biology of arthritis and joint disorders (15 mins) 15 mins Q&A</p>	<p>Prof Alex Parker (chair), acknowledgement of country and overview of symposium</p> <p>Russel Harrison, CEO WH Prof Andy Hill, DVC-R&I VU</p> <p>Introduction and Q&A facilitation: Prof Alan Hayes</p> <p>Presenters: Mr Raymond Crowe Prof Jane Fitzpatrick</p>
	Break – 30 mins Morning tea	Physiotherapy, exercise physiology and nursing student demonstrations
2.0	Session 2	
10.45 – 11.25am	<p>Overview of 'Joint Wellness' project 6 mins</p> <p>Robotics and exoskeletons in preventing and managing chronic disease Including demonstration 6 mins</p> <p>Orthobiologics – what is possible for biology of bone and cartilage 6 mins</p> <p>Advances in nutrition for weight management 6 mins</p> <p>Q&A with all presenters 15 mins</p>	<p>Q&A interaction through Menti</p> <p>Prof Itamar Levinger & Dr Mary Woessner</p> <p>Prof Rezaul Begg & team</p> <p>Dr Jack Feehan & Mr Raymond Crowe</p> <p>Prof Alan Hayes, Monica Wellington (VU dietician) & WH dietician (TBC)</p> <p>Facilitator: Alex Parker</p>
11.30-12.10	<p>Debate Interventions for OA: "To inject or not to inject?"</p> <p>Panel with facilitator</p>	<p>Facilitator: Prof Phong Tran</p> <p>Panellists: Simon Talgot, Lachlan Batty, Jane Fitzpatrick, Raymond Crowe</p> <p>Q&A through Menti</p>
	Lunch (travel packs) – 50 mins Informal tours of building P facilities	Physiotherapy and exercise physiology student demonstrations in biomechanics and exercise physiology labs
	Close at 1pm	

EXPLORING NEW FRONTIERS IN THE CARE OF EARLY JOINT DISEASE

You are warmly invited to attend the inaugural Victoria University, Western Health and AIMMS Musculoskeletal Research Symposium.

TOPICS

- Preventative strategies
- Robotics and exoskeletons
- Orthobiologics
- Nutrition and weight management
- The role of injections

EVENT DETAILS

📅 Friday 10 November 2023
🕒 8:30am - 1:00pm
📍 VU Footscray Park Campus
Ballarat Road, Footscray
Room M001, Level 0, Building M

*Refreshments and lunch will be provided

REGISTRATION
<https://bit.ly/AS10H>

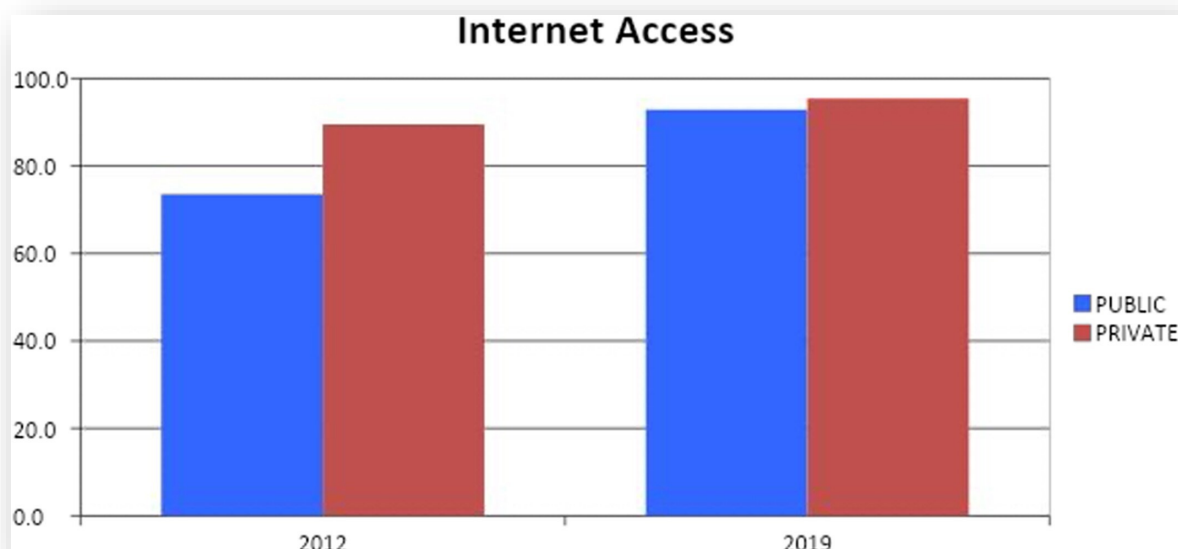
CPD Points
AOA members attending this symposium can claim 2.5 CPD hours.
Physiotherapists attending this symposium can claim hours in their CPD portfolio as long as it is relevant to their work.

PUBLICATIONS

1. Manobianco, A., Seah, S., Fraval, A. and **Tran, P.** (2023), How the internet is accessed by and influences surgical patient's decision making. *ANZ Journal of Surgery*. <https://doi.org/10.1111/ans.18554>
2. Patten RK, Asiloglu A, Levinger I, Tacey A, Pascoe M, **Tran P**, McKenna MJ, Said CM, Coric N, De Gori M, Lane R, Apostolopoulos V, Woessner MN, Parker A. Prevalence of diagnosable depression in patients awaiting orthopaedic specialist consultation: a cross-sectional analysis. *BMC Musculoskelet Disord*. 2023 Jul 22;24(1):599. doi: 10.1186/s12891-023-06688-0. PMID: 37481532; PMCID: PMC10362723.
3. Rhee I, Tirosh O, Ho A, Griffith A, Salehi L, Jensen A, Spiers L, **Tran P.** Do Certain Patient Cohorts Benefit From Different Surgical Approaches in Total Hip Arthroplasty? *J Arthroplasty*. 2023 Aug;38(8):1545-1550. doi: 10.1016/j.arth.2023.02.026. Epub 2023 Feb 21. PMID: 36813211.
4. CRISTAL Study Group; Sidhu VS, Kelly TL, Pratt N, Graves SE, Buchbinder R, Adie S, Cashman K, Ackerman IN, Bastiras D, Brighton R, Burns AWR, Chong BH, Clavisi O, Cripps M, Dekkers M, de Steiger R, Dixon M, Ellis A, Griffith EC, Hale D, Hansen A, Harris A, Hau R, Horsley M, James D, Khorshid O, Kuo L, Lewis PL, Lieu D, Lorimer M, MacDessi SJ, McCombe P, McDougall C, Mulford J, Naylor JM, Page RS, Radovanovic J, Solomon M, Sorial R, Summersell P, **Tran P**, Walter WL, Webb S, Wilson C, Wysocki D, Harris IA. Effect of Aspirin vs Enoxaparin on 90-Day Mortality in Patients Undergoing Hip or Knee Arthroplasty: A Secondary Analysis of the CRISTAL Cluster Randomized Trial. *JAMA Netw Open*. 2023 Jun 1;6(6):e2317838. doi: 10.1001/jamanetworkopen.2023.17838. PMID: 37294566; PMCID: PMC10257098.
5. Rhee I, Tirosh O, Ho A, Griffith A, Salehi L, Jensen A, Spiers L, **Tran P.** The effect of 3 commonly used surgical approaches for total hip arthroplasty on mid- to long-term patient-reported outcome measures. *Hip Int*. 2023 Sep 25;11207000231199342. doi: 10.1177/11207000231199342. Epub ahead of print. PMID: 37743745.
6. Marshall CJ, Ganderton C, Feltham A, El-Ansary D, Pranata A, O'Donnell J, Takla A, **Tran P**, Wickramasinghe N, Tirosh O. Smartphone Technology to Remotely Measure Postural Sway during Double- and Single-Leg Squats in Adults with Femoroacetabular Impingement and Those with No Hip Pain. *Sensors (Basel)*. 2023 May 26;23(11):5101. doi: 10.3390/s23115101. PMID: 37299827; PMCID: PMC10255184.
7. Tacey A, Behne J, Patten RK, Ngo MT, Thomas R, Ancilleri J, Bone C, Paredes Castro A, McCarthy H, Harkin K, Gilmartin-Thomas JF, Takla A, Downie C, Mulcahy J, Ball M, Sharples J, Dash S, Lawton A, Wright B, Sleeth P, Kostecki T, Sonn C, McKenna MJ, Apostolopoulos V, Lane R, Said CM, De Gori M, McAinch A, **Tran P**, Levinger I, Parker A, Woessner MN, Pascoe M. Development of a Digital Health Intervention to Support Patients on a Waitlist for Orthopedic Specialist Care: Co-Design Study. *JMIR Form Res*. 2023 Dec 8;7:e41974. doi: 10.2196/41974. PMID: 38064257; PMCID: PMC10746964.
8. Sasanelli F, Le KDR, Tay SBP, Tran P, Verjans JW. Applications of Natural Language Processing Tools in Orthopaedic Surgery: A Scoping Review. *Applied Sciences*. 2023; 13(20):11586. <https://doi.org/10.3390/app132011586>
9. Murphy NJ, Eyles J, Spiers L, Davidson E, Kim YJ, Linklater JM, Afacan O, Bennell KL, Burns A, Diamond LE, Dickenson E, **Fary C**, Foster NE, Fripp J, Grieve SM, Griffin DR, Heller G, Molnar R, Neubert A, O'Donnell J, O'Sullivan M, Randhawa S, Reichenbach S, Singh P, **Tran P**, Hunter DJ. Moderators, Mediators, and Prognostic Indicators of Treatment With Hip Arthroscopy or Physical Therapy for Femoroacetabular Impingement Syndrome: Secondary Analyses From the Australian FASHIoN Trial. *Am J Sports Med*. 2023 Jan;51(1):141-154. doi: 10.1177/03635465221136547. Epub 2022 Nov 25. PMID: 36427015
10. Murphy NJ, Diamond LE, Bennell KL, Burns A, Dickenson E, Eyles J, Fary C, Grieve SM, Griffin DR, Kim YJ, Linklater JM, Lloyd DG, Molnar R, O'Connell RL, O'Donnell J, Randhawa S, J Singh P, Spiers L, Tran P, Wrigley T, Hunter DJ. Which hip morphology measures and patient factors are associated with age of onset and symptom severity in femoroacetabular impingement syndrome? *Hip Int*. 2023 Jan;33(1):102-111. doi: 10.1177/11207000211038550. Epub 2021 Aug 23. PMID: 34424780.B

RESEARCH

11. adres I A, Talbot S, Bartlett J (June 02, 2023) Long-Term Follow-Up of the Roux-Goldthwait Patellar Stabilization Procedure in a Predominantly Adult Population. *Cureus* 15(6): e39890. doi:10.7759/cureus.39890
12. Talbot S, Zordan R, Bennett K, Sasanelli F, Griffith A, Woodford N, Walter WL. Quadriceps tendon malalignment is an independent anatomical deformity which is the primary abnormality associated with lateral facet patellofemoral joint osteoarthritis. *Knee Surg Sports Traumatol Arthrosc.* 2023 Dec;31(12):5950-5961. doi: 10.1007/s00167-023-07661-z. Epub 2023 Nov 21. PMID: 37989778.
13. Fary C, Cholewa J, Ren AN, Abshagen S, Anderson MB, Tripuraneni K. Multicenter, prospective cohort study: immediate postoperative gains in active range of motion following robotic-assisted total knee replacement compared to a propensity-matched control using manual instrumentation. *Arthroplasty.* 2023 Dec 4;5(1):62. doi: 10.1186/s42836-023-00216-0. PMID: 38044446; PMCID: PMC10694935.
14. Fary C, Cholewa J, Abshagen S, Van Andel D, Ren A, Anderson MB, Tripuraneni K. Stepping Beyond Counts in Recovery of Total Hip Arthroplasty: A Prospective Study on Passively Collected Gait Metrics. *Sensors (Basel).* 2023 Jul 20;23(14):6538. doi: 10.3390/s23146538. PMID: 37514832; PMCID: PMC10383890.
15. Huntington L, Griffith A, Spiers L, Pile R, Batty L, Tulloch S, Tran P. Suture-tape augmentation of anterior cruciate ligament reconstruction: a prospective, randomised controlled trial (STACLR). *Trials.* 2023 Mar 24;24(1):224. doi: 10.1186/s13063-023-07127-0. PMID: 36964584; PMCID: PMC10037835.
16. Batty L, Huntington LS, Chung T, Spiers L, Tulloch S, Webster KE, Tran P. The Effect of Tibial Tunnel Drilling Technique on Retained Intra-Articular Bone Debris Following Anterior Cruciate Ligament Reconstruction. *Arthrosc Sports Med Rehabil.* 2023 Feb 7;5(2):e337-e343. doi: 10.1016/j.asmr.2022.12.002. PMID: 37101881; PMCID: PMC10123406.
17. Lenz CG, Urbanschitz L, Shepherd DW. Dynamic syndesmotic stabilisation and reinforcement of the antero-inferior tibiofibular ligament with internal brace. *Foot (Edinb).* 2023 Sep;56:102026. doi: 10.1016/j.foot.2023.102026. Epub 2023 Mar 25. PMID: 37001344.



Internet access. Comparison 2012–2019.

How the internet is accessed by and influences surgical patient's decision making.

Manobianco, A., Seah, S., Fraval, A. and Tran, P.

ANZ J Surg. 2023 Sep;93(9):2054-2055. doi: 10.1111/ans.18554. Epub 2023 Jun 2. PMID: 37265079.

We conducted a cohort-controlled study comparing internet access and health-related search habits of private and public patients in a large Metropolitan centre in 2012 and repeated the study design 2019. Low risks ethics approval was obtained (QA2018.16). In 2019, 200 patients from a tertiary metropolitan orthopaedic outpatient clinic and 202 patients from a private surgical clinic were recruited. A 37-question survey was administered in English, with the aid of interpreters when necessary. The results of these questions were compared to those of a survey completed in 2012.⁶ The chi2 test was used to compare proportions. A two-sided *T*-test was used to compare means between the 2012 and 2019 results. *P*-values <0.05 were considered significant.

Participant age range was between 17 and 88 years. 94.2% of patients in 2019 reported internet access (*n* = 379), increased from 79% in 2012 (*P* < 0.05) (Fig. 1.). The patients over 60, increased their internet access by 44%. Public and private patients have statistically the same internet access in 2019, 91% and 95% respectively (*P* = 0.7094).

Amongst all study patients, education level influenced internet access the most. Internet access amongst people with a primary school education or no formal education was 69% and 99% with university or higher education. In 2019, 64.8% of all patients used the internet to search their medical condition and treatment options.

Government websites were the most trusted for health information (public 74.5%, private 66.4%). Private surgeons' websites 15% and social media 3%.

Of all internet users in 2019, 94.4% owned a smartphone (public 96.5%, private 92.5%). Patients with lower education levels tended to use smartphones as

the primary way to access the internet compared to more educated patients (*P* < 0.001). 36.4% of private patients researched their surgeon on the internet. Eleven percent of private patients would change their surgeon based upon their internet search.

The internet plays an increasingly important role in healthcare. Our study represents the only cohort controlled 7-year follow-up of internet usage amongst public and privately insured surgical patients in Australia. Internet accessibility is the biggest influence on a patient's likelihood of researching their health condition,⁵ and most patients now use the internet to research and influence their health decision making. It is impossible to control the content of health information on the internet, much of which is of low quality and of limited use to patients due to poor readability.³

Since our original study in 2012⁶ internet access between public and private patients is statistically the same. Historically the determinants of internet access were socioeconomic factors and age.⁶⁻¹¹ We demonstrated that socioeconomic status and age no longer predict if a patient will use the internet to research their health condition.

The difference is the device each group uses to access the internet. Amongst public and lower education level patient's smartphones were the most used device. This is consistent with previous studies.⁸ Well-designed patient centred responsive websites could provide the means to close the health literacy gap between public and private patients.¹² This would help in the surgical consent process^{12, 13} in the context of connected health.

Surgeons and health organizations can confidently migrate health information and communication to internet-based technology without leaving large groups of the population behind.

Prevalence of diagnosable depression in patients awaiting orthopaedic specialist consultation: a cross-sectional analysis

Patten RK, Asilloglu A, Levinger I, Tacey A, Pascoe M, Tran P, McKenna MJ, Said CM, Coric N, De Gori M, Lane R, Apostolopoulos V, Woessner MN, Parker A.

BMC Musculoskelet Disord. 2023 Jul 22;24(1):599. doi: 10.1186/s12891-023-06688-0. PMID: 37481532; PMCID: PMC10362723.

Background: Musculoskeletal conditions, including osteoarthritis (OA), are a leading cause of disability and chronic pain, and are associated with high rates of comorbid depression. However, signs of depression are often masked by pain. The aim of this study was to determine the prevalence and severity of depression and pain in individuals awaiting specialist orthopaedic consultation. A secondary objective was to determine the relationship between pain and depression, irrespective of demographic factors and clinical diagnosis.

Methods: Cross-sectional analysis of individuals awaiting orthopaedic consultation at a public hospital in Melbourne, Australia. Relevant data were extracted from medical records and questionnaires. Descriptive statistics were used to summarise participant characteristics. The patient health questionnaire (PHQ-9) was used to assess depression and a numerical rating

scale (NRS) was used to assess pain severity. Multiple linear regression analyses were used to establish the relationship between pain and depression.

Results: Nine hundred and eighty-six adults (mean \pm standard deviation, age = 54.1 ± 15.7 years, 53.2% women) participated in the study. OA was present in 56% of the population and 34% of the entire population had moderate depression or greater, 19% of which met the criteria for major depressive disorder. Moderate-to-severe pain was present in 79% of individuals with OA and 55% of individuals with other musculoskeletal complaints. Pain was significantly associated with depression scores ($\beta = 0.84$, adjusted $R^2 = 0.13$, $P < 0.001$), and this relationship remained significant after accounting for gender, age, education and employment status, OA status, number of joints affected and waiting time ($\beta = 0.91$, adjusted $R^2 = 0.19$, $P < 0.001$).

Conclusions: Depression affects one-third of individuals on an orthopaedic waitlist. A strong link between pain and depression in patients awaiting specialist orthopaedic consultation exists, indicating a need for an integrated approach in addressing pain management and depression to manage this complex and comorbid presentation.



Do Certain Patient Cohorts Benefit From Different Surgical Approaches in Total Hip Arthroplasty?

Rhee I, Tirosh O, Ho A, Griffith A, Salehi L, Jensen A, Spiers L, Tran P.

J Arthroplasty. 2023 Aug;38(8):1545-1550. doi: 10.1016/j.arth.2023.02.026. Epub 2023 Feb 21. PMID: 36813211.

Background: Unfortunately, an important minority of total hip arthroplasty (THA) patients report unsatisfactory outcomes. We aimed to compare the patient-reported outcome measures (PROMs) for three main THA approaches and evaluate the effect of sex and body mass index (BMI) on PROMs over a 10-year period.

Methods: A total of 906 patients (535 women, mean BMI 30.7 [range, 15 to 58]; 371 men, mean BMI 31.2 [range, 17 to 56]) who underwent primary THA by an anterior (AA) (312), lateral (LA) (211), or posterior (383) approach between 2009 and 2020 at a single institution were evaluated using the Oxford Hip Score (OHS). PROMs were prospectively collected before surgery and routinely at 6 weeks, 6 months, and 1, 2, 5, and 10 years after surgery.

Results: All three approaches resulted in significant postoperative OHS improvement. Overall, women experienced significantly lower OHS than men ($P < .01$).

A significant negative relationship between BMI and OHS was identified and this relationship was exacerbated with an AA ($P < .01$). Women who had a BMI ≤ 25 reported OHS with a difference more than 5 points in favor of the AA, while women who had a BMI ≥ 42 reported an OHS with a difference more than 5 in favor of the LA. The BMI ranges were wider when comparing the anterior and posterior approaches, 22 to 46 for women and > 50 for men. For men, an OHS difference more than 5 was only seen with BMI ≥ 45 in favor of the LA.

Conclusion: This study demonstrated that no single THA approach is superior to another but rather that certain patient cohorts may benefit more from specific approaches. We suggest that women who have a BMI ≤ 25 should consider undergoing an anterior approach for THA, while for women who have a BMI ≥ 42 , a lateral approach or for a BMI ≥ 46 , a posterior approach is advised.



Effect of Aspirin vs Enoxaparin on 90-Day Mortality in Patients Undergoing Hip or Knee Arthroplasty: A Secondary Analysis of the CRISTAL Cluster Randomized Trial.

CRISTAL Study Group; Sidhu VS, Kelly TL, Pratt N, Graves SE, Buchbinder R, Adie S, Cashman K, Ackerman IN, Bastiras D, Brighton R, Burns AWR, Chong BH, Clavisi O, Cripps M, Dekkers M, de Steiger R, Dixon M, Ellis A, Griffith EC, Hale D, Hansen A, Harris A, Hau R, Horsley M, James D, Khorshid O, Kuo L, Lewis PL, Lieu D, Lorimer M, MacDes-si SJ, McCombe P, McDougall C, Mulford J, Naylor JM, Page RS, Radovanovic J, Solomon M, Sorial R, Summersell P, Tran P, Walter WL, Webb S, Wilson C, Wysocki D, Harris IA.

JAMA Netw Open. 2023 Jun 1;6(6):e2317838. doi: 10.1001/jamanetworkopen.2023.17838. PMID: 37294566; PMCID: PMC10257098.

Importance: Ischemic heart disease remains the leading cause of mortality following hip and knee arthroplasty. Due to its antiplatelet and cardioprotective properties, aspirin has been proposed as an agent that could reduce mortality when used as venous thromboembolism (VTE) prophylaxis following these procedures.

Objective: To compare aspirin with enoxaparin in reducing 90-day mortality for patients undergoing hip or knee arthroplasty procedures.

Design, setting, and participants: This study was a planned secondary analysis of the CRISTAL cluster randomized, crossover, registry-nested trial performed across 31 participating hospitals in Australia between April 20, 2019, and December 18, 2020. The aim of the CRISTAL trial was to determine whether aspirin was noninferior to enoxaparin in preventing symptomatic VTE following hip or knee arthroplasty. The primary study restricted the analysis to patients undergoing total hip or knee arthroplasty for a diagnosis of osteoarthritis only. This study includes all adult patients (aged ≥ 18 years) undergoing any hip or knee arthroplasty procedure at participating sites during the course of the trial. Data were analyzed from June 1 to September 6, 2021.

Interventions: Hospitals were randomized to administer all patients oral aspirin (100 mg daily) or subcutaneous enoxaparin (40 mg daily) for 35 days after hip arthroplasty and 14 days after knee arthroplasty

procedures.

Main outcomes and measures: The primary outcome was mortality within 90 days. The between-group difference in mortality was estimated using cluster summary methods.

Results: A total of 23 458 patients from 31 hospitals were included, with 14 156 patients allocated to aspirin (median [IQR] age, 69 [62-77] years; 7984 [56.4%] female) and 9302 patients allocated to enoxaparin (median [IQR] age, 70 [62-77] years; 5277 [56.7%] female). The mortality rate within 90 days of surgery was 1.67% in the aspirin group and 1.53% in the enoxaparin group (estimated difference, 0.04%; 95% CI, -0.05%-0.42%). For the subgroup of 21 148 patients with a nonfracture diagnosis, the mortality rate was 0.49% in the aspirin group and 0.41% in the enoxaparin group (estimated difference, 0.05%; 95% CI, -0.67% to 0.76%).

Conclusions and relevance: In this secondary analysis of a cluster randomized trial comparing aspirin with enoxaparin following hip or knee arthroplasty, there was no significant between-group difference in mortality within 90 days when either drug was used for VTE prophylaxis.

The effect of 3 commonly used surgical approaches for total hip arthroplasty on mid- to long-term patient-reported outcome measures.

Rhee I, Tirosh O, Ho A, Griffith A, Salehi L, Jensen A, Spiers L, Tran P.

Hip Int. 2023 Sep 25:11207000231199342. doi: 10.1177/11207000231199342. Epub ahead of print. PMID: 37743745.

Introduction:

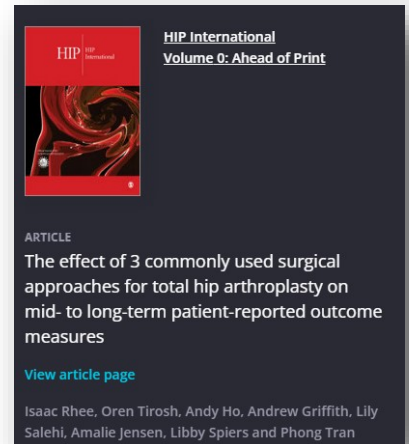
The most effective surgical approach for total hip arthroplasty (THA) remains controversial. Comparisons of surgical approach based on patient-reported outcome measures (PROMs) have been limited to short- to mid-term outcomes or the comparison of only 2 approaches. The aim of this study was to compare PROMs for the 3 main approaches for THA with up to 10 years follow-up.

Methods:

A total of 906 patients who underwent primary THA at a single hospital between 2009 and 2020 through an anterior (312), lateral (211) or posterior (383) approach were evaluated using the Oxford Hip Score (OHS), EuroQoL-5-Dimension (EQ-5D-5L) and visual analogue scale/verbal rating scale for pain (VAS/VRS). PROMs were prospectively collected before surgery and routinely at 6 weeks, 6 months and 1, 2, 5 and 10 years after surgery.

Results:

There was no significant difference in demographics or comorbidities between the 3 groups. All 3 approaches resulted in a significant improvement in overall PROMs after THA, and plateaued after 6 months postoperatively, with no difference between the approaches (OHS, $p < 0.01$; EQ-5D-5L Index, $p < 0.01$; VAS/VRS, $p < 0.01$). The EQ-5D-5L mobility dimension showed that the lateral approach resulted in 20% more patients reporting problems with mobility than the posterior and anterior approaches at the 6-week, 6-month, 2-year and 10-year follow-up.



Conclusions:

This study shows that all 3 common THA approaches substantially and similarly



Smartphone Technology to Remotely Measure Postural Sway during Double- and Single-Leg Squats in Adults with Femoroacetabular Impingement and Those with No Hip Pain.

Marshall CJ, Ganderton C, Feltham A, El-Ansary D, Pranata A, O'Donnell J, Takla A, Tran P, Wickramasinghe N, Tirosh O.

Sensors (Basel). 2023 May 26;23(11):5101. doi: 10.3390/s23115101. PMID: 37299827; PMCID: PMC10255184.

Background: The COVID-19 pandemic has accelerated the demand for utilising telehealth as a major mode of healthcare delivery, with increasing interest in the use of tele-platforms for remote patient assessment. In this context, the use of smartphone technology to measure squat performance in people with and without femoroacetabular impingement (FAI) syndrome has not been reported yet. We developed a novel smartphone application, the TelePhysio app, which allows the clinician to remotely connect to the patient's device and measure their squat performance in real time using the smartphone inertial sensors. The aim of this study was to investigate the association and test-retest reliability of the TelePhysio app in measuring postural sway performance during a double-leg (DLS) and single-leg (SLS) squat task. In addition, the study investigated the ability of TelePhysio to detect differences in DLS and SLS performance between people with FAI and without hip pain.

Methods: A total of 30 healthy (nfemales = 12) young adults and 10 adults (nfemales = 2) with diagnosed FAI syndrome participated in the study. Healthy participants performed DLS and SLS on force plates in our laboratory, and remotely in their homes using the TelePhysio smartphone application. Sway measurements were compared using the centre of pressure (CoP) and smartphone inertial sensor data. A total of 10 participants with FAI (nfemales = 2) performed the squat assessments remotely. Four sway measurements in each axis (x, y, and z) were computed from the TelePhysio inertial sensors: (1) average acceleration magnitude from the mean (aam), (2) root-mean-square acceleration (rms), (3) range acceleration (r), and (4) approximate entropy (apen), with lower

values indicating that the movement is more regular, repetitive, and predictable. Differences in TelePhysio squat sway data were compared between DLS and SLS, and between healthy and FAI adults, using analysis of variance with significance set at 0.05.

Results: The TelePhysio aam measurements on the x- and y-axes had significant large correlations with the CoP measurements ($r = 0.56$ and $r = 0.71$, respectively). The TelePhysio aam measurements demonstrated moderate to substantial between-session reliability values of 0.73 (95% CI 0.62-0.81), 0.85 (95% CI 0.79-0.91), and 0.73 (95% CI 0.62-0.82) for aamx, aamy, and aamz, respectively. The DLS of the FAI participants showed significantly lower aam and apen values in the medio-lateral direction compared to the healthy DLS, healthy SLS, and FAI SLS groups (aam = 0.13, 0.19, 0.29, and 0.29, respectively; and apen = 0.33, 0.45, 0.52, and 0.48, respectively). In the anterior-posterior direction, healthy DLS showed significantly greater aam values compared to the healthy SLS, FAI DLS, and FAI SLS groups (1.26, 0.61, 0.68, and 0.35, respectively).

Conclusions: The TelePhysio app is a valid and reliable method of measuring postural control during DLS and SLS tasks. The application is capable of distinguishing performance levels between DLS and SLS tasks, and between healthy and FAI young adults. The DLS task is sufficient to distinguish the level of performance between healthy and FAI adults. This study validates the use of smartphone technology as a tele-assessment clinical tool for remote squat assessment.

Development of a Digital Health Intervention to Support Patients on a Wait-list for Orthopedic Specialist Care: Co-Design Study.

Tacey A, Behne J, Patten RK, Ngo MT, Thomas R, Ancilleri J, Bone C, Paredes Castro A, McCarthy H, Harkin K, Gil-martin-Thomas JF, Takla A, Downie C, Mulcahy J, Ball M, Sharples J, Dash S, Lawton A, Wright B, Sleeth P, Kostecki T, Sonn C, McKenna MJ, Apostolopoulos V, Lane R, Said CM, De Gori M, McAinch A, Tran P, Levinger I, Parker A, Woessner MN, Pascoe M.

JMIR Form Res. 2023 Dec 8;7:e41974. doi: 10.2196/41974. PMID: 38064257; PMCID: PMC10746964.

Background: The demand for orthopedic specialist consultations for patients with osteoarthritis in public hospitals is high and continues to grow. Lengthy waiting times are increasingly affecting patients from low socioeconomic and culturally and linguistically diverse backgrounds who are more likely to rely on public health care.

Objective: This study aimed to co-design a digital health intervention for patients with OA who are waiting for an orthopedic specialist consultation at a public health service, which is located in local government areas (LGAs) of identified social and economic disadvantage.

Methods: The stakeholders involved in the co-design process included the research team; end users (patients); clinicians; academic experts; senior hospital staff; and a research, design, and development agency. The iterative co-design process comprised several key phases, including the collation and refinement of evidence-based information by the research team, with assistance from academic experts. Structured interviews with 16 clinicians (female: n=10, 63%; male: n=6, 38%) and 11 end users (age: mean 64.3, SD 7.2 y; female: n=7, 64%; male: n=4, 36%) of 1-hour duration were completed to understand the requirements for the intervention. Weekly workshops were held with key stakeholders throughout development. A different cohort of 15 end users (age: mean 61.5, SD 9.7 y; female: n=12, 80%; male: n=3, 20%) examined the feasibility of the study during a 2-week testing period.

The System Usability Scale was used as the primary measure of intervention feasibility.

Results: Overall, 7 content modules were developed and refined over several iterations. Key themes highlighted in the clinician and end user interviews were the diverse characteristics of patients, the hierarchical structure with which patients view health practitioners, the importance of delivering information in multiple formats (written, audio, and visual), and access to patient-centered information as early as possible in the health care journey. All content was translated into Vietnamese, the most widely spoken language following English in the local government areas included in this study. Patients with hip and knee osteoarthritis from culturally and linguistically diverse backgrounds tested the feasibility of the intervention. A mean System Usability Scale score of 82.7 (SD 16) was recorded for the intervention, placing its usability in the excellent category.

Conclusions: Through the co-design process, we developed an evidence-based, holistic, and patient-centered digital health intervention. The intervention was specifically designed to be used by patients from diverse backgrounds, including those with low health, digital, and written literacy levels. The effectiveness of the intervention in improving the physical and mental health of patients will be determined by a high-quality randomized controlled trial.

Applications of Natural Language Processing Tools in Orthopaedic Surgery: A Scoping Review.

Sasanelli F, Le KDR, Tay SBP, Tran P, Verjans JW.

Applied Sciences. 2023; 13(20):11586. <https://doi.org/10.3390/app132011586>

The advent of many popular commercial forms of natural language processing tools has changed the way we can utilise digital technologies to tackle problems with big data. The objective of this review is to evaluate the current research and landscape of natural language processing tools and explore their potential use and impact in the field of orthopaedic surgery. In doing so, this review aims to answer the research question of how NLP tools can be utilised to streamline processes within orthopedic surgery. To do this, a scoping review was performed in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and Arksey and O'Malley framework for scoping reviews, as well as a computer-assisted literature search on the Medline, Embase and Google Scholar databases. Papers that evaluated the use of natural language processing tools in the field of orthopaedic surgery were included. Our literature search identified 24 studies that were eligible for inclusion. Our scoping review captured articles that highlighted multiple uses of NLP tools in orthopaedics. In particular, one study reported on the use of NLP for

intraoperative monitoring, six for detection of adverse events, five for establishing orthopaedic diagnoses, two for assessing the patient experience, two as an informative resource for patients, one for predicting readmission, one for triaging, five for auditing and one for billing and coding. All studies assessed these various uses of NLP through its tremendous computational ability in extracting structured and unstructured text from the medical record, including operative notes, pathology and imaging reports, and progress notes, for use in orthopaedic surgery. Our review demonstrates that natural language processing tools are becoming increasingly studied for use and integration within various processes of orthopaedic surgery. These AI tools offer tremendous promise in improving efficiency, auditing and streamlining tasks through their immense computational ability and versatility. Despite this, further research to optimise and adapt these tools within the clinical environment, as well as the development of evidence-based policies, guidelines and frameworks are required before their wider integration within orthopaedics can be considered.



Mediators, and Prognostic Indicators of Treatment With Hip Arthroscopy or Physical Therapy for Femoroacetabular Impingement Syndrome: Secondary Analyses From the Australian FASHIoN Trial.

Murphy NJ, Eyles J, Spiers L, Davidson E, Kim YJ, Linklater JM, Afacan O, Bennell KL, Burns A, Diamond LE, Dickenson E, **Fary C**, Foster NE, Fripp J, Grieve SM, Griffin DR, Heller G, Molnar R, Neubert A, O'Donnell J, O'Sullivan M, Randhawa S, Reichenbach S, Singh P, **Tran P**, Hunter DJ. Moderators,

Am J Sports Med. 2023 Jan;51(1):141-154. doi: 10.1177/03635465221136547. Epub 2022 Nov 25. PMID: 36427015.

Background: Although randomized controlled trials comparing hip arthroscopy with physical therapy for the treatment of femoroacetabular impingement (FAI) syndrome have emerged, no studies have investigated potential moderators or mediators of change in hip-related quality of life.

Purpose: To explore potential moderators, mediators, and prognostic indicators of the effect of hip arthroscopy and physical therapy on change in 33-item international Hip Outcome Tool (iHOT-33) score for FAI syndrome.

Study design: Cohort study; Level of evidence, 2.

Methods: Overall, 99 participants were recruited from the clinics of orthopaedic surgeons and randomly allocated to treatment with hip arthroscopy or physical therapy. Change in iHOT-33 score from baseline to 12 months was the dependent outcome for analyses of moderators, mediators, and prognostic indicators. Variables investigated as potential moderators/prognostic indicators were demographic variables, symptom duration, alpha angle, lateral center-edge angle (LCEA), Hip Osteoarthritis MRI Scoring System (HOAMS) for selected magnetic resonance imaging (MRI) features, and delayed gadolinium-enhanced MRI of cartilage (dGEMRIC) score. Potential mediators investigated were change in chosen bony morphology measures, HOAMS, and dGEMRIC score from baseline to 12 months. For hip arthroscopy, intraoperative procedures performed (femoral ostectomy ± acetabular ostectomy ± labral repair ± ligamentum teres debridement) and quality of surgery graded by a blinded surgical review panel were investigated for potential association with iHOT-33 change. For physical

therapy, fidelity to the physical therapy program was investigated for potential association with iHOT-33 change.

Results: A total of 81 participants were included in the final moderator/prognostic indicator analysis and 85 participants in the final mediator analysis after exclusion of those with missing data. No significant moderators or mediators of change in iHOT-33 score from baseline to 12 months were identified. Patients with smaller baseline LCEA ($\beta = -0.82$; $P = .034$), access to private health care ($\beta = 12.91$; $P = .013$), and worse baseline iHOT-33 score ($\beta = -0.48$; $P < .001$) had greater iHOT-33 improvement from baseline to 12 months, irrespective of treatment allocation, and thus were prognostic indicators of treatment response. Unsatisfactory treatment fidelity was associated with worse treatment response ($\beta = -24.27$; $P = .013$) for physical therapy. The quality of surgery and procedures performed were not associated with iHOT-33 change for hip arthroscopy ($P = .460-.665$ and $P = .096-.824$, respectively).

Conclusion: No moderators or mediators of change in hip-related quality of life were identified for treatment of FAI syndrome with hip arthroscopy or physical therapy in these exploratory analyses. Patients who accessed the Australian private health care system, had smaller LCEAs, and had worse baseline iHOT-33 scores, experienced greater iHOT-33 improvement, irrespective of treatment allocation.

Which hip morphology measures and patient factors are associated with age of onset and symptom severity in femoroacetabular impingement syndrome?

Murphy NJ, Diamond LE, Bennell KL, Burns A, Dickenson E, Eyles J, Fary C, Grieve SM, Griffin DR, Kim YJ, Linklater JM, Lloyd DG, Molnar R, O'Connell RL, O'Donnell J, Randhawa S, J Singh P, Spiers L, Tran P, Wrigley T, Hunter DJ.

Hip Int. 2023 Jan;33(1):102-111. doi: 10.1177/11207000211038550. Epub 2021 Aug 23. PMID: 34424780.

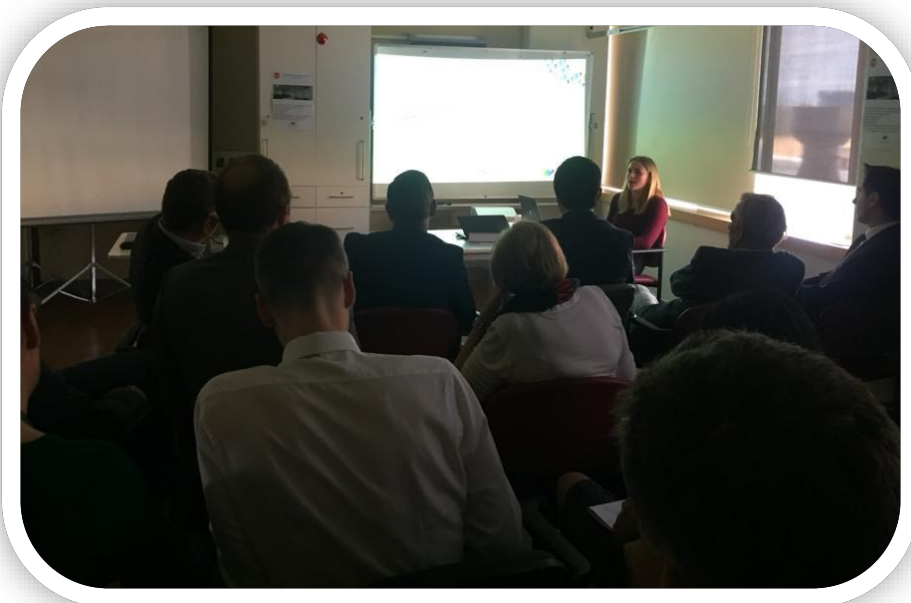
Background: Bony morphology is central to the pathomechanism of femoroacetabular impingement syndrome (FAIS), however isolated radiographic measures poorly predict symptom onset and severity. More comprehensive morphology measurement considered together with patient factors may better predict symptom presentation. This study aimed to determine the morphological parameter(s) and patient factor(s) associated with symptom age of onset and severity in FAIS.

Methods: 99 participants (age 32.9 ± 10.5 years; body mass index (BMI) 24.3 ± 3.1 kg/m²; 42% females) diagnosed with FAIS received standardised plain radiographs and magnetic resonance scans. Alpha angle in four radial planes (superior to anterior), acetabular version (AV), femoral torsion, lateral centre-edge, anterior centre-edge (ACEA) and femoral neck-shaft angles were measured. Age of symptom onset (age at

presentation minus duration of symptoms), international Hip Outcome Tool-33 (iHOT-33) and modified UCLA activity scores were recorded. Backward stepwise regression assessed morphological parameters and patient factors (age, sex, BMI, symptom duration, annual income, private/public healthcare system accessed) to determine variables independently associated with onset age and iHOT-33 score.

Results: Earlier symptom onset was associated with larger superoanterior alpha angle ($p = 0.007$), smaller AV ($p = 0.023$), lower BMI ($p = 0.010$) and public healthcare system access ($p = 0.041$) ($r^2 = 0.320$). Worse iHOT-33 score was associated with smaller ACEA ($p = 0.034$), female sex ($p = 0.040$), worse modified UCLA activity score ($p = 0.010$) and public healthcare system access ($p < 0.001$) ($r^2 = 0.340$).

Conclusions: Age of symptom onset was chiefly predicted by femoral and acetabular bony morphology measures, whereas symptom



Long-Term Follow-Up of the Roux-Goldthwait Patellar Stabilization Procedure in a Predominantly Adult Population

Badres I A, Talbot S, Bartlett J (June 02, 2023)

Cureus 15(6): e39890. doi:10.7759/cureus.39890

Background: The Roux-Goldthwait patellar stabilisation (R-G) involves the medial transfer of the distal attachment of the lateral half of the patellar tendon. This paper reviews the long-term results of the R-G in a predominantly adult population. **Methodology** This is a retrospective study looking at patients with recurrent patellar instability who were treated with an R-G technique by a single surgeon over a 36-year period from 1976 to 2012. The primary outcomes measured were further patella instability and further knee surgical procedures. **Results** A total of 202 knees in 170 patients were analysed in this study. Patients between the ages of 9 and 70 years old (average 21 years old) were included in this study. The operative procedure changed during the study period. Initially, patients did not undergo concurrent arthroscopy. Early patients were likely to have additional lateral releases and open

medial reefing procedures. More recent patients were more likely to undergo an isolated R-G procedure via a minimally invasive incision. The most common further operative procedure was arthroscopy of the knee for chondral pathology at 13.9%. These were more common early in the study period when patients did not have an initial arthroscopy. Recurrent dislocation was reported at 12.9%, with 5.9% of patients having revision stabilisation surgery, at a mean of 5.58 years (range = 1-15 years) postoperatively.

Conclusions The R-G procedure is effective in treating recurrent patellar instability in both the paediatric and adult population. It can be performed as an isolated and minimally invasive procedure which is technically simple and has low morbidity.



Quadriceps tendon malalignment is an independent anatomical deformity which is the primary abnormality associated with lateral facet patellofemoral joint osteoarthritis.

Talbot S, Zordan R, Bennett K, Sasanelli F, Griffith A, Woodford N, Walter WL.

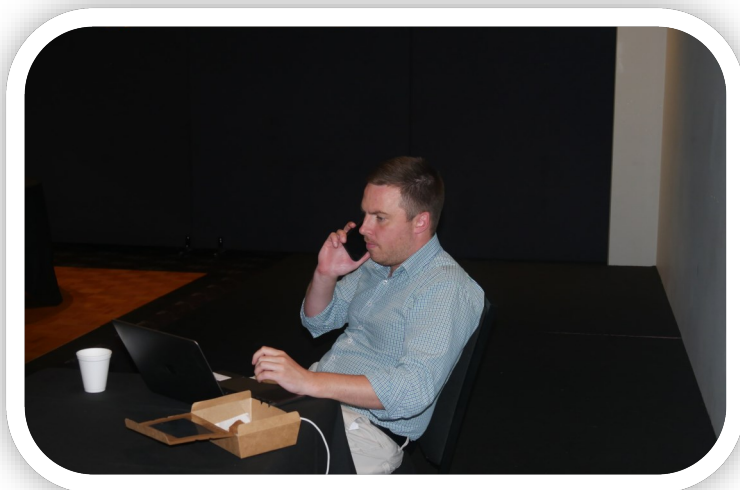
Knee Surg Sports Traumatol Arthrosc. 2023 Dec;31(12):5950-5961. doi: 10.1007/s00167-023-07661-z. Epub 2023 Nov 21. PMID: 37989778.

Purpose: The purposes of this study are to, firstly, develop techniques to accurately identify extensor mechanism malalignment by measuring the alignment of the quadriceps tendon (QTA) with computerized tomography (CT) scans. Secondly, to investigate correlations between QTA and lower limb bony anatomical variations within a representative normal population. Lastly, to evaluate the clinical significance of QTA by establishing its potential connection with lateral facet patellofemoral joint osteoarthritis (LFPFJOA).

Method: CT scans were orientated to a mechanical axis reference frame and three techniques developed to measure the alignment of the quadriceps tendon. Multiple measurement of bony alignment from the hip to the ankle were performed on each scan. A series of 110 cadaveric CT scans were measured to determine normal values, reproducibility, and correlations with bony anatomy. Secondly, a comparison between 2 groups of 25 patients, 1 group with LFPFJOA and 1 group with isolated medial OA and no LFPFJOA.

Results: From the cadaveric study, it was determined that the alignment of the quadriceps tendon is on average 4.3° (SD 3.9) varus and the apex of the tendon is 9.1 mm (SD 7.7 mm) lateral to the trochlear groove and externally rotated 1.9° (SD 12.4°) from the centre of the femoral shaft. There was no association between the quadriceps tendon alignment and any other bony measurements including tibial tubercle trochlear groove distance (TTTG), coronal alignment, trochlear groove alignment and femoral neck anteversion. A lateralized QTA was significantly associated with LFPFJOA. QTA in the LFPFJOA group was 9.6° varus (SD 2.8°), 21.3 mm (SD 6.6) lateralised and 17.3° ER (SD 11°) compared to 5.5° (SD 2.3°), 10.7 mm (SD 4.9) and 3.3° (SD 7.2°), respectively, in the control group ($p < 0.001$). A significant association with LFPFJOA was also found for TTTG (17.2 mm (SD 5.7) vs 12.1 mm (SD 4.3), $p < 0.01$). Logistic regression analysis confirmed the QTA as having the stronger association with LFPFJOA than TTTG (AUC 0.87 to 0.92 for QTA vs 0.79 for TTTG).

Conclusion: These studies have confirmed the ability to accurately determine QTA on CT scans. The normal values indicate that the QTA is highly variable and unrelated to bony anatomy. The comparative study has determined that QTA is clinically relevant and a lateralised QTA is the dominant predictor of severe LFPFJOA. This deformity should be considered when assessing patella maltracking associated with patella osteoarthritis, patella instability and arthroplasty.



RESEARCH

Multicenter, prospective cohort study: immediate postoperative gains in active range of motion following robotic-assisted total knee replacement compared to a propensity-matched control using manual instrumentation.

Fary C, Cholewa J, Ren AN, Abshagen S, Anderson MB, Tripuraneni K.

Arthroplasty. 2023 Dec 4;5(1):62. doi: 10.1186/s42836-023-00216-0. PMID: 38044446; PMCID: PMC10694935.

Background: Range of motion (ROM) following total knee replacement (TKR) has been associated with patient satisfaction and knee function, and is also an early indicator of a successful procedure. Robotic-assisted TKR (raTKR) is considered to reproduce more precise resections, and, as a result, may be associated with improved early patient satisfaction compared to manual TKR (mTKR). The purpose of this study was to evaluate the early postoperative active ROM (aROM) between raTKR and mTKR.

Methods: A total of 216 mTKR patients were propensity-matched, in terms of age, gender, comorbidities, and BMI, to 216 raTKR cases. Intraoperative and immediate postoperative adverse events were collected. Knee flexion and extension aROM were measured preoperatively and at one- and three months after operation.

Results: Changes in flexion aROM were significantly greater in raTKR vs. mTKR at one- (6.9°, 95% CI: 3.5, 10.4°) and three months (4.9°, 95% CI: 2.1, 7.7°). Flexion aROM was greater at three postoperative months compared to preoperative aROM only in the raTKR group, and raTKR patients had higher odds of achieving $\geq 90^\circ$ of flexion at one month after operation (OR: 2.15, 95% CI: 1.16, 3.99). There were no significant differences between groups in intraoperative ($P > 0.999$) or postoperative adverse events.

Conclusions: Compared with mTKR, raTKR resulted in less loss of aROM immediately after operation and a faster recovery of aROM within three months after operation.



But in a good way! I learned lots from scrubbing in & just being in the theatre environment 😊

Personal shout out to:
Mr Talbot, Mr Phong, Joan ☺️
Ben, Phoebe, ~~Phoebe~~, Andy, Allen, Jeff, Maddy, Anthony, Sean, Peter, Mia, Michael, Tim, Daniel, Jess, ~~Joan~~ Evan
(if I spelled your name wrong, I'm sorry, please don't launch me to Anaesthetics or worse, radiology! XD)

Dear Ortho Team,
Thanks so much for giving me wrong- I loved my 3 weeks rotation w the team, especially all the opportunities I got to scrub in, even if I can only hold the retractors or limb in place most of the time (& screwing in one nail into a tibial plate that was replaced b/c someone chose the wrong sized nail 😂). Before Ortho, I never thought I might consider becoming a surgeon, but now this path is definitely on the table. All the tips & tricks offered to me in theatre, ward rounds & clinics are much appreciated! All the best for the rest of the year & see you guys around & maybe on rotation as a MD4 in 2025 ☺️
- Jessie G Tan MD2 (Aug 2023)

Stepping Beyond Counts in Recovery of Total Hip Arthroplasty: A Prospective Study on Passively Collected Gait Metrics.

Fary C, Cholewa J, Abshagen S, Van Andel D, Ren A, Anderson MB, Tripuraneni K.

Sensors (Basel). 2023 Jul 20;23(14):6538. doi: 10.3390/s23146538. PMID: 37514832; PMCID: PMC10383890.

Gait quality parameters have been used to measure recovery from total hip arthroplasty (THA) but are time-intensive and previously could only be performed in a lab. Smartphone sensor data and algorithmic advances presently allow for the passive collection of qualitative gait metrics. The purpose of this prospective study was to observe the recovery of physical function following THA by assessing passively collected pre- and post-operative gait quality metrics. This was a multicenter, prospective cohort study. From six weeks pre-operative through to a minimum 24 weeks post-operative, 612 patients used a digital care management application that collected gait metrics. Average weekly walking speed, step length, timing asymmetry, and double limb support percentage pre- and post-operative values were compared with a paired-sample *t*-test. Recovery was defined as the post-operative week when the respective gait metric was no longer statistically inferior to the pre-operative value. To control for multiple comparison error, significance was set at $p < 0.002$.

Walking speeds and step length were lowest, and timing asymmetry and double support percentage were greatest at week two post-post-operative ($p < 0.001$). Walking speed (1.00 ± 0.14 m/s, $p = 0.04$), step length (0.58 ± 0.06 m/s, $p = 0.02$), asymmetry ($14.5 \pm 19.4\%$, $p = 0.046$), and double support percentage ($31.6 \pm 1.5\%$, $p = 0.0089$) recovered at 9, 8, 7, and 10 weeks post-operative, respectively. Walking speed, step length, asymmetry, and double support all recovered beyond pre-operative values at 13, 17, 10, and 18 weeks, respectively ($p < 0.002$). Functional recovery following THA can be measured via passively collected gait quality metrics using a digital care management platform. The data suggest that metrics of gait quality are most negatively affected two weeks post-operative; recovery to pre-operative levels occurs at approximately 10 weeks following primary THA, and follows a slower trajectory compared to previously reported step count recovery trajectories.



Suture-tape augmentation of anterior cruciate ligament reconstruction: a prospective, randomised controlled trial (STACLR).

Huntington L, Griffith A, Spiers L, Pile R, Batty L, Tulloch S, Tran P.

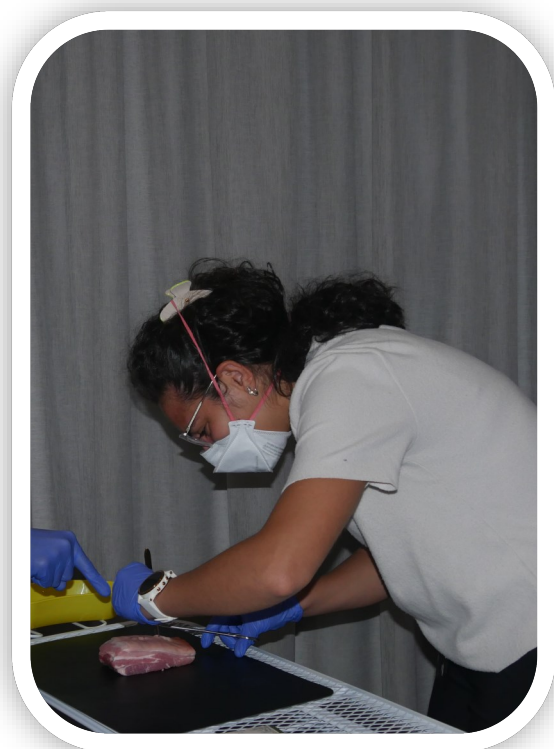
Trials. 2023 Mar 24;24(1):224. doi: 10.1186/s13063-023-07127-0. PMID: 36964584; PMCID: PMC10037835.

Background: Anterior cruciate ligament (ACL) reconstruction aims to restore anteroposterior and rotatory stability to the knee following ACL injury. This requires the graft to withstand the forces applied during the process of ligamentisation and the rehabilitative period. We hypothesise that the use of suture tape augmentation of single bundle ACL reconstruction (ACLR) will reduce residual knee laxity and improve patient-reported outcomes at 2-year follow-up. We will conduct a 1:1 parallel arm single-centre randomised controlled trial comparing suture tape augmented ACLR to standard ACLR technique.

Methods: The study design will be a parallel arm 1:1 allocation ratio randomised controlled trial. Sixty-six patients aged 18 and over waitlisted for primary ACLR

will be randomised. Patients requiring osteotomy and extra-articular tenodesis and who have had previous contralateral ACL rupture or repair of meniscal or cartilage pathology that modifies the post-operative rehabilitation will be excluded. The primary outcome measure will be the side-to-side difference in anterior tibial translation (measured on the GNRB arthrometer) at 24 months post-surgery. GNRB arthrometer measures will also be taken preoperatively, at 3 months and 12 months post-surgery. Secondary outcomes will include patient-reported outcome measures (PROMs) collected online, including quality of life, activity and readiness to return to sport, complication rates (return to theatre, graft failure and rates of sterile effusion), examination findings and return to sport outcomes. Participants will be seen preoperatively, at 6 weeks, 3 months, 12 months and 24 months post-surgery. Participants and those taking arthrometer measures will be blinded to allocation.

Discussion: This will be the first randomised trial to investigate the effect of suture-tape augmentation of ACLR on either objective or subjective outcome measures. The use of suture-tape augmentation in ACLR has been associated with promising biomechanical and animal-level studies, exhibiting equivalent complication profiles to the standard technique, with initial non-comparative clinical studies establishing possible areas of advantage for the technique. The successful completion of this trial will allow for an improved understanding of the in situ validity of tape augmentation whilst potentially providing a further platform for surgical stabilisation of the ACL graft.



The Effect of Tibial Tunnel Drilling Technique on Retained Intra-Articular Bone Debris Following Anterior Cruciate Ligament Reconstruction.

Batty L, Huntington LS, Chung T, Spiers L, Tulloch S, Webster KE, Tran P.

Arthrosc Sports Med Rehabil. 2023 Feb 7;5(2):e337-e343. doi: 10.1016/j.asmr.2022.12.002. PMID: 37101881; PMCID: PMC10123406.

Purpose: To assess the effect of tibial tunnel drilling technique (retro-drilled bone socket vs full tibial tunnel) on the presence and grade of postoperative, intra-articular bone debris following primary hamstring anterior cruciate ligament (ACL) reconstruction.

Methods: This was a retrospective cohort study of primary hamstring autograft ACL reconstructions performed by 2 surgeons. Two blinded independent reviewers assessed the presence and length of retained intra-articular bone debris on the immediate postoperative lateral radiograph. Debris was graded according to a predefined 5-point ordinal grading system: grade 0 (no debris) to IV (severe debris). Results were analyzed according to the type of tibial tunnel; retro-drilled socket or full tibial tunnel using Kappa statistics and the Mann-Whitney *U* test.

Results: Sixty-five patients undergoing primary hamstring ACL were included (39 tibial socket: 26 full

tibial tunnel). Bone debris was observed among the tibial socket technique in 29 of 39 instances (74.3%), compared with 14 of 26 (53.8%) instances for the full tibial tunnel technique ($P = .09$). Where there was measurable debris present, the tibial socket group had a mean length of bone debris of 13.7 ± 6.2 mm as compared with the full tibial tunnel, 10.0 ± 4.7 mm ($P = .165$). There were significant differences in bone debris gradings between the 2 treatment groups, with tibial sockets having an overall greater grade ($P = .04$).

Conclusions: A difference in the presence of, or length of, retained bone debris on the postoperative lateral radiograph was not demonstrated between the retro-drilled bone socket and full tibial tunnel techniques. However, when bone debris was present, greater grades of debris were seen in the retro-drilled socket group.



Dynamic syndesmotic stabilisation and reinforcement of the antero-inferior tibiofibular ligament with internal brace.

Lenz CG, Urbanschitz L, Shepherd DW.

Foot (Edinb). 2023 Sep;56:102026. doi: 10.1016/j.foot.2023.102026. Epub 2023 Mar 25. PMID: 37001344.

Purpose: Syndesmotic injuries are associated with long recovery times and high morbidity. Systematic reviews show a trend toward better outcomes of suture buttons compared to screw fixation. The anteroinferior tibiofibular ligament (AITFL) confers the most significant component of translational and rotatory stability. Techniques have developed which reinforce the AITFL. This study aimed to assess results of syndesmotic stabilisation with dynamic stabilisation and reinforcement of the AITFL, with an early mobilisation program.

Materials and methods: Retrospective case series of 30 patients (mean age 31 years). Syndesmotic instability was confirmed with clinical examination, MRI and weightbearing-CT. Dynamic syndesmotic stabilisation with a single suture button was performed followed by the placement of an Internal Brace over the AITFL. A standardised postoperative rehabilitation protocol was established. Foot and Ankle Ability Measure (FAAM) scores were collected postoperatively.

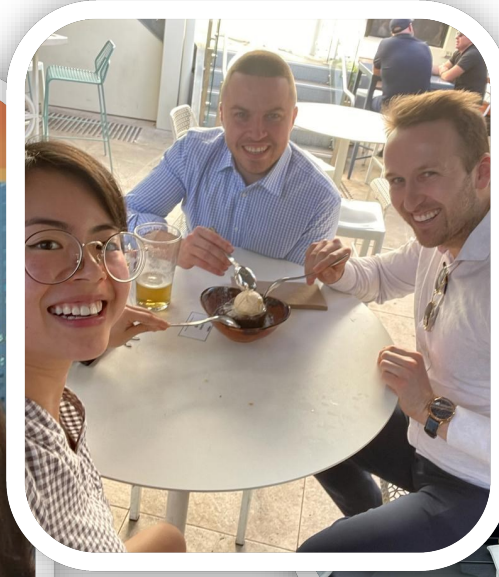
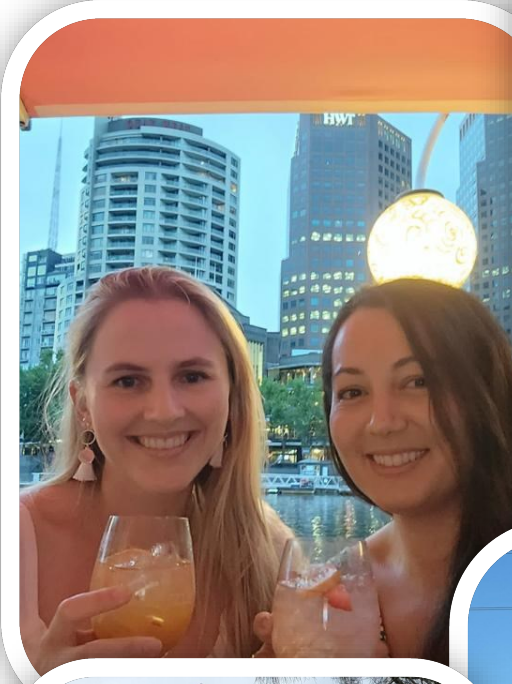
Results: The average follow-up was 13 months. The total FAAM score for ADL was 95 ± 4.9 % (range, 83 - 100 %) and for sport activities 87 ± 13.6 % (range, 50 - 100 %). The rating of mean postoperative function for ADL was 94 ± 5.5 % (range, 80 - 100 %) and 90 ± 13 %

(range, 35 - 100 %) for sportv. The difference between acute and chronic injuries was statistically higher ($p < 0.05$) for daily activities and sport, but the rating of current level of sport activities as well as for daily activities did not show a significant difference ($p = 0.9296$ and $p = 0.1615$, respectively). Twenty-seven patients (90 %) rated their overall current level of function as normal or nearly normal.

Conclusion: This technique aims to directly stabilise the AITFL and the interosseous components of the syndesmosis, and allow early mobilisation and return to sport at 10 weeks. Early results show the procedure is safe, with comparable results to the literature. Acute injuries showed better results of the FAAM score than chronic injuries.



SOCIAL



WARRNAMBOOL ROAD TRIP

Dr Lily Salehi — Unaccredited Registrar

"Warrnambool Road Trip Chronicles: Friendship, Adventure, and the Heart-warming Hues of Timboon and the Farmers Market"

In the heart of Victoria, lies the coastal gem of Warrnambool, a destination that became the backdrop for an unforgettable road trip for us. Beyond the routine of hospital life, this journey proved to be more than just a getaway—it became a catalyst for building lasting friendships, fostering teamwork, and creating memories that will resonate in the corridors of our workplace for years to come.

As we set out on the open road, anticipation and excitement filled the air. The scenic drive to Warrnambool became more than just a physical journey; it became a metaphorical adventure,

symbolizing our collective pursuit of camaraderie and shared experiences outside the office confines.

Warrnambool, with its rugged coastline, charming streets, and vibrant culture, provided the perfect backdrop for our journey of friendship. From exploring the iconic Tower hill wildlife reserve to strolling along the picturesque Breakwater, each shared moment strengthened the bonds between colleagues, transcending the professional sphere into genuine friendships. We also had the pleasure of exploring the vibrant local farmer's market. The market was a tapestry of colours and flavours, offering a chance to



Saturdays are for the girls— Phoebe, Cheryl, Ben and Lily running into some friendly locals during Brunch

connect with the community and savour the fresh produce and handmade crafts.

Away from the stressors of daily work life, the road trip offered a reprieve. Laughter echoed in the car, and the fresh sea breeze in Warrnambool provided a therapeutic escape. The shared experiences became a source of relaxation, enabling us to return to work with renewed energy and a deeper appreciation for the importance of work-life balance.

Timboon's Delicious Detour and Andy's Surprise:

On the way back, we made a delightful detour to Timboon—a



SOCIAL

quaint town that stole our hearts. Little did we know, this detour would be the setting for a heart-warming surprise. Our colleague, Andy, joined us in Timboon, a leisurely lunch and a scoop of locally made ice cream provided the perfect pit stop, allowing us to savour the flavours of regional cuisine and indulge in a sweet treat that added the perfect finishing touch to our road trip adventure.

■



Andy, Ben, Lily and Gerdu (Lily's dog) enjoying an ice cream and company at Timboon



Min, Ben and Lily starting off the roadtrip with a cheeky pit stop after work at KFC



Ben, Min, Cheryl, Phoebe and Lily hiking up Tower Hill

AOA SOCCER TOURNAMENT

Dr Andy Ho



In 2023 the Orthopaedic Soccer tournament happened on the 28th of October at Knox Regional Sports Park. Never in Western history has a back to back premiership occurred and so there was a lot riding on the results of this

tournament. It was played with two pools, and the winner of the pools would face off in a final to select the victorious team and subsequently best Orthopaedic Unit in Victoria.

There was significant pre-game banter between the different hospital, however some teams were finding it difficult to recruit the necessary number of players. Whilst originally eight teams had been planned to play off in two pools, Dandenong and RCH ended up needing to join forces which left an uneven number and a sour taste in the organiser's efforts. As a result, Western the champions from 2022 were asked to step in and split their team for the benefit of the competition. Reluctantly, Professor Tran agreed to this request and two

Western teams (Hammers and Drillers) were enrolled in the tournament.

The stakes couldn't be higher now with the teams split and potentially weakened as a result. There was a flurry of movement within the Orthopaedic department led by Prof Tran and Shyamolie to get some additional personnel who have worked within Orthopaedics to join. This resulted in an additional resident and physiotherapist who were able to join and rounded out two already strong teams. Leading up to the match, two practice sessions were organised where Barcelona's trademark Tiki Taka style of play was being curated and replicated.

On the day of the tournament, the Melbourne weather held up well as the jumping castle got some attention and everybody enjoyed the salted caramel gelato. The souvlakis were again a hit, but everyone was here for the taste of a drink from the oversized acetabular cup welded onto the trophy with courtesy by one of our Medical Industry colleagues. I won't bore you with the details of what happened next, but both Western Hammers and Drillers charged through the pool undefeated and led their respective groups with a goal difference of 28 and 17 goals



AOA SOCCER TOURNAMENT



respectively. The final ended up being a tight tussle with the Hammers holding the Drillers off with a 3 goal lead before the Drillers knocked a few balls into the back of the net to end the game at 5 goals each. Whilst ordinarily there would've been a penalty, the rest of

the competition were getting a bit bored with the fact that Western had already won, so we all gathered to congratulate the teams and share the victory spoils.

For the first time in our history, Western won back to back trophies and also finished the group phase

for both pools at the top of the table. Thank you to everyone who came to the practices, came on the day and continually supported the team to help us build the soccer dynasty we have today. ■



ORTHO PAEDIC CHRISTMAS PARTY

Dr Min Jia Tang — Unaccredited Registrar



Mr Shepherd at the Graham grabbing a bite to eat.

This year's party presented an opportunity for everyone to showcase their creativity, individuality and get in touch with their feminine side. Mark Reich, one of our HMOs, brilliantly photoshopped 2 Barbie movie posters to star the faces of Western Health's Hottest Celebrities (Heads of Unit)- Prof Tran and Mr Duy Thai (Barbie) and Mr Dan Sydenham and Mr Brett Moreira (Ken) as our promotional flyers. These were distributed across all campuses and became a source of amusement for staff across the board. As a result, the buy-in this year was phenomenal, with a total of 99 attendees dancing the night away. Prof Tran even rented out a life sized Barbie box for many memorable photos which were taken on the night. Prizes were given for best

The annual Ortho Christmas party has been longstanding tradition with an impressive reputation that extends beyond the walls of Western Health. This year's theme 'Barbie' was chosen as a lighthearted way to challenge stereotypes and inject

a sense of humour and whimsy into the annual celebration- besides, who doesn't like seeing Orthopods in pink? After shortlisting and visiting several potential venues, Sean Griffiths and I decided on hosting the party at The French Brasserie, a beautiful intimate venue in the heart of the city. As a bonus, we ended up running in to



SOCIAL

dressed Barbie, Ken and couple.

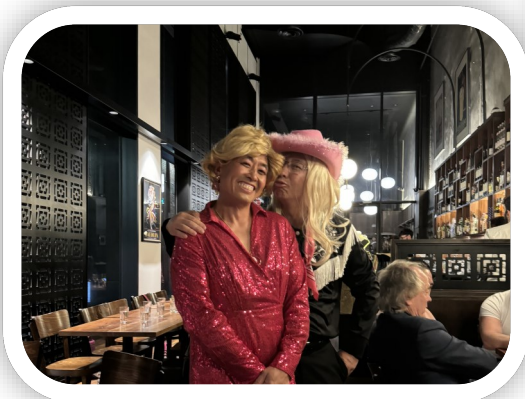
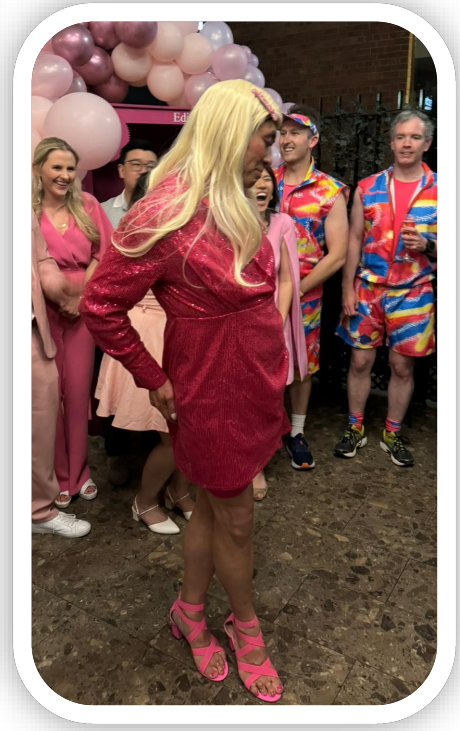
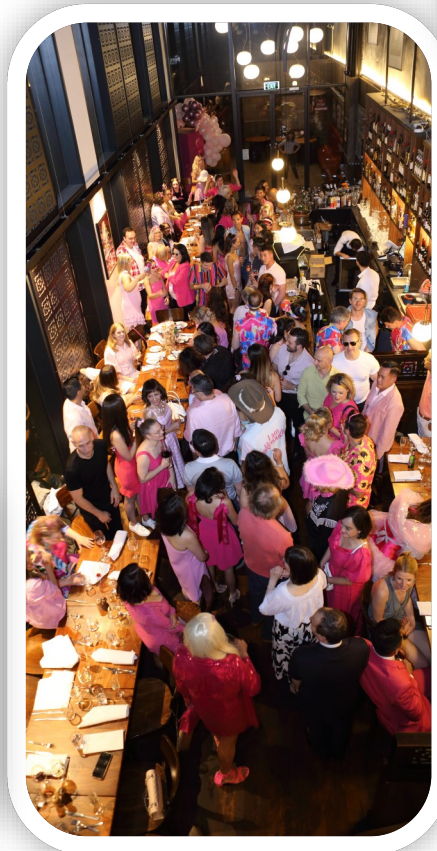
The night also served as an opportunity for reflection and gratitude. Prof Tran gave a heartwarming speech drawing parallels between the challenges and life lessons from Barbie and those faced in our day to day lives. The many triumphs of the year were highlighted and given applause. Sue Borstner (1W ANUM) and Olivia Vaccaro (Orthopaedic Outpatient clinic ANUM) also received special thanks for their unwavering dedication to patient care and registrar support.

Kick Ons continued down the road at Garden State Hotel with Mr Sydenham making a guest appearance wearing a slight deviation from his usual XR

meeting attire. The Orthopaedic unit tore up the dance floor partying into the early hours of the morning, in usual fashion.

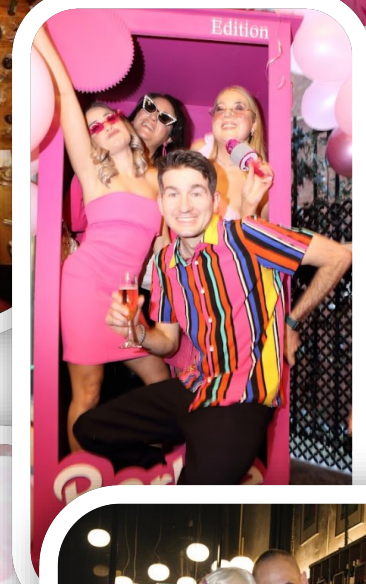
I would like to thank Mr Brett Moreira, Lidia Carbone and Sean Griffiths for their support and teamwork in organising this event. It was a truly unforgettable night filled with

laughter, fond memories and pink. ■



ORTHOPAEDIC CHRISTMAS

PAR-



SOCIAL



FEMALE STAFF CHANGE

Duy Thai Ortho Xmas Party 23 Brett Moreira
Plus on clipboard Not just for
Sue Little (Dwayne
Goins) 2:00 PM
A Mother of
Crisis 3:00 PM
Sue Little (Dwayne
Goins) 4:00 PM
Sue Little (Dwayne
Goins) 5:00 PM

The French
Broom 6:00 PM
Mathewson Lane
Broom 7:00 PM

7-8 PM
November 17th

THANK YOU



Min as a Medical student throwing Chris Harris into the sink at the latter's request. Circa 2018.

Min as a registrar- still shorter than Chris despite a step. She's currently waitlisted as a Cat 3 limb lengthening patient. Circa 2023.



It is not every year that I am lucky enough to meet a mentor and surgeon as special as Chris Harris. I first met Chris as a medical student at RCH back in 2018 where he taught me how to do a running subcuticular suture— very advanced stuff for a student! I hassled Chris relentlessly for suturing time and his teaching and patience paid off. As an intern, each time a registrar or consultant complimented my suturing, I would proudly say 'Chris Harris taught me to close.'

Chris, thank you for inspiring and believing in me to achieve my dream of pursuing a career in Orthopaedics. As you predicted all those years ago, the path since graduating hasn't always been easy. On particularly difficult days, I often find myself reflecting on our time together in theatre or discussing life over a cup of hot milky water (otherwise known as extremely weak tea) when I was that bright eyed, bushy tailed student many

years ago. Even though I went off into the world after graduating, you were always cheering me on from the sidelines. And for this, I am extremely grateful. ■

This year, I have been impressed by you always making time for your patients and colleagues. You are genuine and kind, and stand up for those in need— something which I hope to embody throughout my career. It has been a real pleasure finally getting to work with you as a registrar this year.—Min

I am really thankful to Mr. Harris and would like to take this opportunity to extend my deepest gratitude for his exceptional support and care throughout these years. His thoughtful gesture of calling me after busy clinic days to check on my well-being will never be forgotten. I am fortunate to have you as my consultant, and I appreciate the effort you put into going above and beyond to provide outstanding

patient care. Your professionalism, empathy, and dedication have truly set a high standard, and I am grateful for the positive impact you've had on my journey.— Lily ■

After 7 years at the Western, it's incredibly hard to thank a single person from the unit. From the registrars who coached and supported me as an intern and resident (Dharsh and Cassie spring to mind), to the registrars who've come back as consultants and continued to provide guidance (Lachlan Batty, Lucas Annabell, Theepan Balasubramaniam and more), the unit has always been exceptional. Thankyou to the many consultants through the years who have welcomed and helped me develop (Will and Rob Pianta, Scott Tulloch, Cam Fary amongst many others), and those who have held me to high standards and supported me when I reached them (Brett

SOCIAL

Moreira and Saeed Asadollahi). And finally thank you to the senior leadership team who have developed the unit so that culture of support has existed over the years - thank you to Mr Sydenham, Thai, Shepherd and Tran.– Sean ■

John Kinealy (Orthopaedic technician): John is a highly experienced and regarded tech with over 40 years of experience. He is an excellent mentor to his junior staff, doctors and techs alike, and always shows the utmost of skill and compassion towards his patients. I always appreciated the time that John took to talk through interesting cases with me and I highly respected the way he went about his work every day. John's expertise is invaluable to the unit as he is an expert in the non-surgical management of musculoskeletal injuries. You are a superstar in the unit John and we all appreciate you! - Ben ■

Thank you to Mandy (JK Ward ANUM) for looking after me and making sure I am fed and watered on the ward. She went as far as to buy me a loaf of bread during COVID when the Supermarket ran out!- Phoebe ■

While not the official Head of Unit, Lidia is many respects the true backbone of the Orthopaedic Department. Lidia organises and coordinates a very busy unit split over 3 sites comprising many consultants, several registrars and a constantly

changing pool of junior medical staff, all without fuss or any desire for self-recognition.

I cannot even remember when I was first introduced to Lidia as a resident, but she seemed to already know my name and have a genuine interest in my journey from the first day I started on the unit. Ever since, Lidia has always met me with warmth and enthusiasm, regardless of the time of day (Yes, even at 6.30am when setting up for Xray meeting), and shows a genuine interest in how you are going.

Lidia is always willing to help, with no job being too much trouble for her. She is also extremely understanding and accommodating of our sometimes busy and forever changing schedules. In addition to ensuring the new junior medical staff are orientated and warmly welcomed to the unit, she also provides a friendly face in the office where the junior staff and registrars often sit, and is always happy to have a chat.

Lidia also speaks with great joy of seeing people return to the unit as consultants, having previously known them as registrars, residents, interns and even medical students of the unit. This shows how integral Lidia has been to the unit over many years, and shows what a close family the Orthopaedic Unit at Western has become over time. Lidia, I would love nothing more than to return to the unit one day in the future if/when I finish training to

continue a special connection you have so warmly developed with so many people in the unit.– Andy ■

Iwould like to thank the unit for their work and dedication. In particular the Registrar team. The registrars co-ordinate a team across 3 campuses and this year it has been very apparent they have formed a cohesive group who have communicated very well. What is impressive is the attitude of the team to deliver excellent patient care, and it is a great example of patient focused care. I would like to thank our leadership team, Phong, Daniel, Duy and Chris. As health delivery models change, our unit remains on the front foot and can deliver best orthopaedic practice due to the strength of our unit.– David Shepherd ■

My thank you: to Min who has inspired and motivated me to keep running and push through my comfort zone – bring on the Melbourne Half Marathon 2024! - Duy Thai ■

I'd like to thank Christopher Weiers (physiotherapist) for all the work he did with regards to securing our advanced practice physio service at Joan Kirner whilst he was Acting Allied Health Manager.– Chris Harris ■

Thank you Alice Stoaidin for saving me from the pub brawl leading Phoebe to get whacked in the head.– Cheryl ■

SOCIAL



Mr Thai having breakfast with the registrars



Toan and Sue holding the fort over Xmas



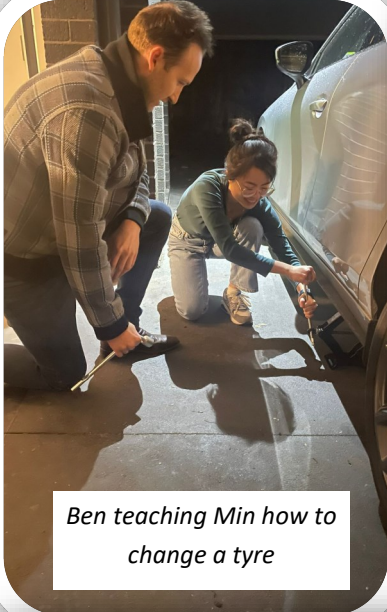
Surprise Birthday for Lidia's 60th



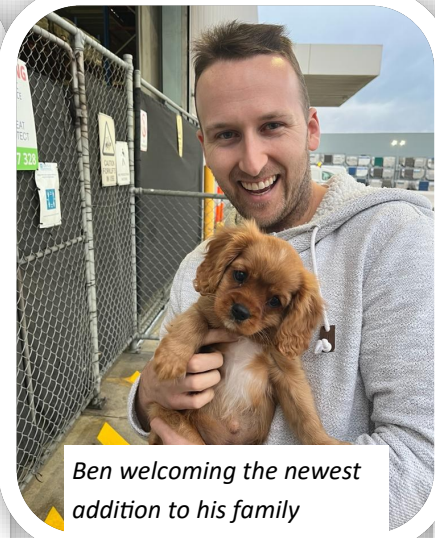
One of our Alumni Dalach taking the Western Hammers to the Top of the World



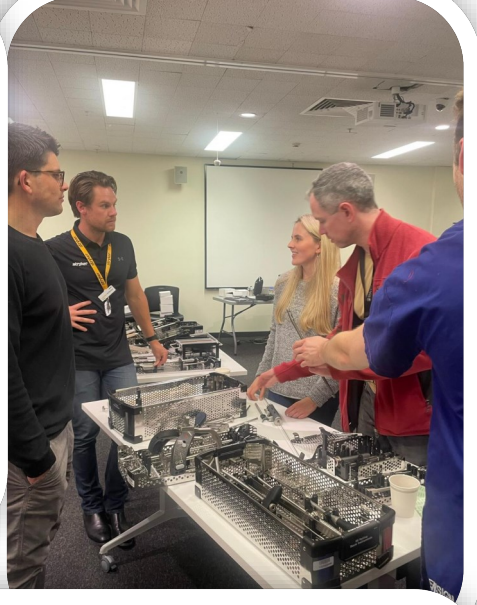
SOCIAL



Ben teaching Min how to change a tyre



Ben welcoming the newest addition to his family



Min Tang
Just a Kia in a world of Maseratis



Sean Griffith
Just a Maserati in a world of Kia's



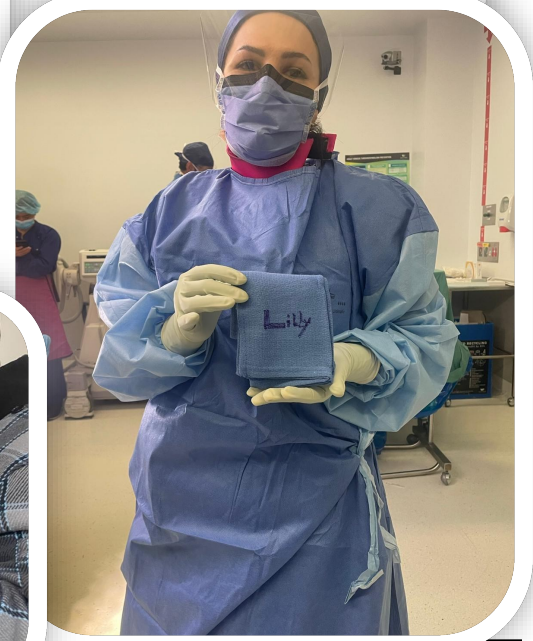
Min Tang

Nguyen, MinhThu 27m ago
Urgent Shift Cover - RADU
Hey all, We have an urgent shit that needs cover. Please let me know if you are available and interested in picking it up. Sunshine RADU REG 28/07/2023 (Tomo...

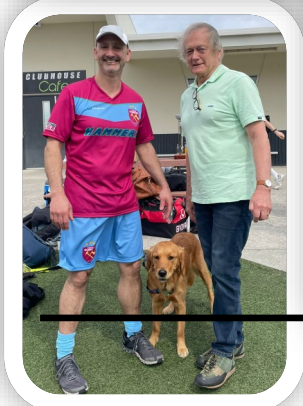
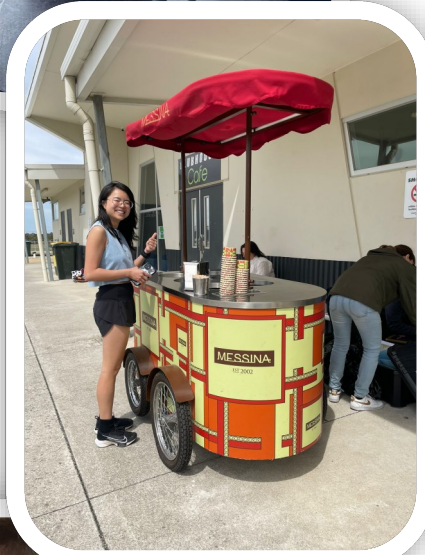
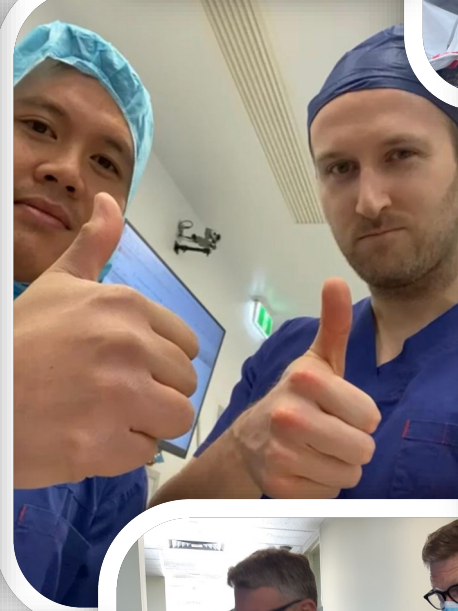


Code brown RADU 4:37 pm

Ben McElwee
Has gastro changed their name? Really Awful Diarrhoea Unit? 4:38 pm



SOCIAL



BIRTHS

BIRTHS & MARRIAGES 2023

WELCOME TO THE WESTERN FAMILY



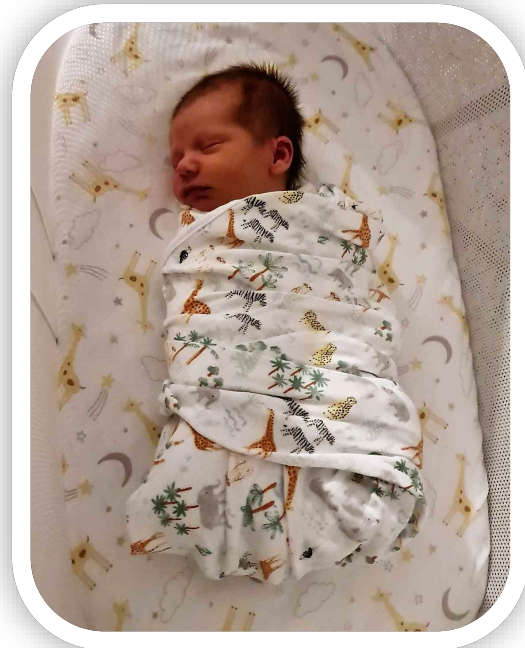
Baby Alexander Lachlan Wight



Bianca Baby Oliver Bonifacio



Baby Estelle & Scott Tulloch



Baby Oliver James Richard

YEARBOOK QUOTES

Welcome to the insightful world of the medical wisdom encapsulated in the words of our dedicated Western Health Orthopaedic Department. In this compilation, we present a curated collection of quotes from doctors who have navigated the challenges and triumphs of the past year. Join us as we celebrate the profound insights, reflections, and moments of inspiration shared by the healers who continue to shape the future of Orthopaedics in the Western suburbs.

Dr Nick Marson- “Sheesh, we stan all the ortho kings and queens today. I was like yaaas Besties, WERK IT! Min was CEO of outpatients. No cap. Finishing before 5 slaps, fax no printer. A good clinic just hits different. Also the katsu today was BUSSIN’. On god.” On trying to get familiar with Gen Z slang.

Dr Andy Griffith- “What the f**k has happened to you lot?”. In response to the above.

Dr Michael Millar - “I don’t get stressed, stress leads to increased cortisol which is bad for gains”: Mike speaking to a tired, puzzled night ED reg at 6.58am who just wanted to go home.

Dr Michael Millar - “we turned it into a faeces salad instead of a faeces sandwich”: supposedly describing the smashed proximal tibia that he fixed.

Dr Lachlan Wight - “nah, get that one away from me, too many vegetables”: Lachlan’s response when offered pizza on journal club night.

Dr Min Tang - “Luke, you are the father” and later in the year “wait... Snoop Dog sings?!”: demonstrating her atrocious lack of any pop culture knowledge... at all.

Prof Phong Tran - “I don’t mind seeing dick”: describing his thoughts a comedy festival

‘magic show’ with his wife and mates.

Dr Cheryl Lee - “you’re so cute... why don’t you die now?”: when referencing why doctors are better than Vets because of animal euthanasia

Mr Chris Harris - “this patient is more skeletally mature than you”: educating a registrar in paediatric fracture clinic.

Dr Min Tang - “I am sooooo meticulous with the penis”: regarding the fabled ‘foreskin in pelvic binder CT report’... or preventing certain appendages from being trapped in a tourniquet... or her home life. No follow-up questions were asked.

Dr Peter Wong - “I’ve done it in almost every position, even prone”: on inserting urinary catheters. Supposedly.



QUOTES

"I'm always up for cross dressing... I'm a very good looking woman": anticipating, many months in advance, his Christmas party winning attire.

Registrar "motion is lotion" -> Surgeon "nah, motion is commotion!": the team discussing whether or not to put a plaster backslab on a patient post-distal humerus ORIF.

Surgeon "you mean to tell me that Western, the healthcare network with the most births in Victoria, does not have any small nappies?!":

Registrar "is this a justification of their inefficiency?" Surgeon - "no, it's documentation of it":

WHO SAID IT

Registrar "You can lead a horse to water, but you can't turn it into glue":

Registrar 1 "Where do horses go when they get sick? The Horse-pital. Lol, just joking. They get shot." -> Registrar 2- "I've always wondered why you didn't make it as a vet".

Registrar - "Can't you just get a 6-pack implant? It's just like getting 6 boob jobs": pondering how best the registrars should embody 'Ken' at the Christmas party.

Registrar - "There is a faecal nugget that just won't go in or out. It's firmly lodged at the entrance of my butt hole. Is this what childbirth feels like? Don't you dare quote that": Unnamed individual sharing too much information about the woes of their life to their colleagues whilst also recognising that Ben collects quotes throughout the year and was acutely aware that this quote may make it into the annual report.

Surgeon - "she's got a femur for an arm": aptly describing a thin patient of ours with a slight BMI of 60.

Surgeon - "union predates X-rays!": a despondent cry out after multiple unnecessary X-rays were ordered on a child.

Surgeon- "You don't take your wife everywhere, but you take your radiolucent, plastic hip positioner wherever you go": strongly affirming another surgeon's hip positioner which allow the use of II in posterior THR... being taken in his car at all times.